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General Catalogue

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ANNOUNCEMENTS FOR 1967-1968

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How to Use This Catalogue

"I plan to be a student at the University of Georgia. College catalogues are strange to me — how do I use it? Where do I find the information I need to know? And how can I be sure *what* I need to know?

"Perhaps agriculture is the field I want, or maybe it's journalism or history. Where do I look in the catalogue to find what's offered in these fields? What about scholarships or student employment or student loans? I don't even know where to begin!"

This University of Georgia catalogue is a thorough reference — you'll find answers to all your questions within these pages. After you have enrolled at the University, you'll find the catalogue a valuable tool in helping you determine what courses you need to take to earn the degree you want — you'll refer to it hundreds of times in the next four years for answers to questions concerning degree requirements. It is therefore essential that you understand how to use it.

Before doing anything else, *thoroughly* familiarize yourself with the General Information section of the catalogue. It contains information on the location and facilities of the University; requirements for admission and how to apply; financial information and where to apply for financial aid; campus life concerning student services and activities, housing, University regulations; academic program with general regulations on degree requirements, credits, grades, etc.

Then, if you know what field you are interested in — such as law, pharmacy, agriculture, business or home economics — turn to that particular section for information about its facilities, degree requirements listed immediately following the General Information section. If you want to know what particular courses are offered by this college in your field, turn to the colored pages of course descriptions in the back of the catalogue. There the schools and colleges are arranged in alphabetical order, each with its course listings by department and course number. (Example: College of Arts and Sciences, English Department, No. 404 English Novels of the Eighteenth Century.) Be sure to read the introduction of the Course Descriptions as well, for it will help you understand this section and acquaint you with the University's policies regarding course offerings.

If you do not know what you plan to major in, you should enroll in the College of Arts and Sciences. Here you can take a broad range of liberal arts courses which will prepare you for a variety of majors. By your junior year you should have decided on your major field.

Your main guide to the catalogue will be the Table of Contents. Each section also has an individual table of contents. For anything you can't find in the Contents, look in the Index. For any term you do not understand such as "matriculation" or "quarter hours," look in the Glossary. There is also a Campus Map to guide you through a visit before enrollment or for your first few days as a confused freshman. Major events, holidays, and quarterly schedules are listed in the College Calendar.

Glossary

(For terms not explained here, refer to the Index or the General Information section of this catalogue.)

- ACCREDITATION** — Recognition granted schools and colleges upon examination by groups of visiting professionals based upon objective standards developed by interested professional agencies. An accredited school or college has measured up to the standards of quality imposed by professional groups and accrediting agencies.
- APPROVED ELECTIVE** — A course chosen by the student with the approval of his adviser or dean. An approved elective usually relates to the student's major or minor field.
- CORE CURRICULUM** — Those courses required in a special area of studies, exclusive of elective or optional courses. The core curriculum usually is completed in the freshman and sophomore years and gives the student a basis for advanced study in the junior and senior years.
- AVERAGE CUMULATIVE** — The arithmetic mean of grades on all courses taken at the University, including failing grades and grades on courses which have been repeated.
- CURRICULUM** — The body of courses taught in a school or college, i.e. "the curriculum of the College of Arts and Sciences."
- FREE ELECTIVE** — A course elected by the student who has fulfilled all requirements for graduation except the total hours. It may be taken in any field and is the sole choice of the student.
- AVERAGE GRADUATING** — A numerical average of at least 73 is required of each candidate for a degree in approved courses totaling at least the number of quarter hours required for the degree by the school or college in which the student is registered.
- MAJOR** — The selected advanced courses which constitute the student's major field of concentration, i.e., English or Botany.
- MATRICULATION** — Enrollment in the University or in a particular school or college. (This includes payment of fees.)
- MINOR** — The selected advanced courses within or related to the major field of concentration. The minor requires fewer hours than the major.
- PREREQUISITE** — A requirement beforehand. Usually a course, an examination, or some other condition which must be met successfully before another course may be taken.
- PROGRAMS OF STUDY** — Groupings of courses designed to qualify a student to receive a specific degree or reach a designated academic goal.
- QUARTER SYSTEM** — The scheduling of four periods of academic study within a calendar year. Each quarter provides for a minimum and maximum amount of scholastic work. Each quarter begins with registration and concludes with examinations over that period's work. Three quarters constitute an academic year.
- REQUIRED ELECTIVE** — A course chosen from a list of approved courses within the student's required curriculum.
- SCHOOLS AND COLLEGES** — The twelve units of the University administered by deans and staffed by faculty members which provide the University's academic programs. Each school or college offers one or more degrees, and all schools and colleges offer degrees through the Graduate School. The type of training and the degree anticipated determine the student's choice of school or college. There is no significant difference in the use of "school" and "college."
- WEIGHTED AVERAGE** — Letter grades translated to an arithmetic mean.



General Information

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General Information

The University

HISTORY

When the University of Georgia was incorporated by an Act of the General Assembly on January 27, 1785, Georgia became the first state to charter a state supported university. In 1784 the General Assembly had set aside 40,000 acres of land to endow a college or seminary of learning.

At the first meeting of the Board of Trustees, held in Augusta on February 13, 1786, Abraham Baldwin was selected President of the University. Baldwin, a native of Connecticut and a graduate of Yale University who had come to Georgia in 1784, drafted the charter adopted by the General Assembly.

The University was actually established in 1801 when a committee of the Board of Trustees selected a land site. John Milledge, later a governor of the state, purchased and gave to the Board of Trustees the chosen tract of 633 acres on the banks of the Oconee River in Northeast Georgia.

Josiah Meigs was named President of the University and work was begun on the first building, originally called Franklin College in honor of Benjamin Franklin and now known as Old College. The University opened in 1801 and graduated its first class in 1804.

The curriculum of traditional classical studies was broadened in 1843 to include courses in law, and again in 1872 when the University received Federal funds for instruction in agriculture and mechanical arts.

Today twelve schools and colleges, with auxiliary divisions, carry on the University's programs of teaching, research and service. These colleges and schools and the dates of their establishment as separate administrative units are: College of Arts and Sciences, 1801; School of Law, 1859; School of Pharmacy, 1903; College of Agriculture, 1906; School of Forestry, 1906; College of Education, 1908; Graduate School, 1910; College of Business Administration, 1912; School of Journalism, 1915; School of Home Economics, 1933; School of Veterinary Medicine, 1946; School of Social Work, 1964. The Division of General Extension, now the Georgia Center for Continuing Education, was incorporated into the University in 1947.

In 1931 the General Assembly of Georgia placed all publicly supported schools and colleges, including The University of Georgia, under the jurisdiction of a single board. This organization, known as the University System of Georgia, is governed by the Board of Regents. The Board of Regents' executive officer, the Chancellor, exercises a general supervisory control over all institutions of the University System. Each institution in the System has its own executive officers and faculty.

GROUND AND BUILDINGS

The first buildings of the University were built in a primeval forest. The town of Athens which grew up about the University community, now ranks as one of the larger cities of the state. It has retained much of its Old South charm.

The North Campus of the University, in the heart of Athens, contains thirty-six major buildings that house most of the College of Arts and Sciences, the School of Law, the School of Social Work, the College of Education, the College of Business Administration, and the School of Journalism. Noteworthy among these buildings are Old College (1801), New College (1832), Demosthenian Hall (1824), the University Chapel (1832), and Phi Kappa Hall (1834). The Ladies' Garden Club Founders Memorial Garden enhances the area near the Landscape Architecture Building.

On the South Campus, thirty-nine major buildings house the College of Agriculture, the School of Forestry, the School of Home Economics, the School of Pharmacy, the School of Veterinary Medicine, the Georgia Center for Continuing Education, the Coliseum, and the Science Center.

These campuses and adjacent lands used by the College of Agriculture and the School of Forestry cover approximately 3,500 acres.

LIBRARIES

The resources of the Libraries of the University are available to the students and faculties of all colleges and schools. On January 1, 1967, the Libraries contained more than 800,000 volumes, plus many manuscripts, maps, microfilms and other items.

Collections of particular value include the famous DeRenne Library of Georgia and Southern historical material, which contains the original Constitution of the Confederate States; the Moore collection of Southern history; the Keith Read Collection of Georgia manuscripts; and some early Georgia colonial manuscripts originally owned by the Earl of Egmont, first president of the Trustees of the Georgia Colony. The mathematical collection, based on the 13,000-volume library of the American Mathematical Society acquired in 1951, is one of the best in the country.

The Libraries contain United States government publications and maps by the Army Map Service. The document collection contains many publications of the states, the League of Nations, the United Nations, and other international organizations. Current subscriptions for more than 5,000 periodicals and newspapers are augmented by publications of important universities and scholarly societies.

In addition to the facilities of the Ilah Dunlap Little Memorial Library (the main library), special services are provided in the Science Library for the College of Agriculture, the School of Home Economics, the School of Pharmacy, and the science departments of the College of Arts and Sciences. Separate collections are located in the Schools of Law and Veterinary Medicine.

Resources of all branches except law are catalogued in the general library. Stacks are open to faculty members and students alike.

Main library hours are from 7:50 a.m. to 11:00 p.m. Monday through Friday; 8:00 a.m. to 5:00 p.m. on Saturday; and 2:00 to 11:00 p.m. on Sunday. Branch library hours vary according to the needs of the clientele.

LABORATORIES

The Science Center consists of six buildings housing the Biological Sciences, Chemistry, Physics, Mathematics-Geography and Geology, Food Science, and Livestock and Poultry. All have well equipped laboratories for instruction and original research.

The School of Pharmacy, the College of Agriculture, the School of Forestry, the School of Home Economics, and the School of Veterinary Medicine have extensive laboratory facilities. Modern business machines are used in accounting and business procedures courses in the College of Business Administration, and the School of Journalism maintains a press room and a radio-television studio for practical training. A computer center which ranks among the most powerful installations in higher education in the United States is located on South Campus in Barrow Hall.

Admission Requirements

HOW TO APPLY

Application for Admission forms may be obtained from the Director of Admissions. Completion of ALL forms and requirements is mandatory before the applicant's request for admission can be considered. Completed forms must be received at least twenty days prior to the registration date and must be accompanied by a non-refundable \$10.00 check or money order to cover the expense of processing the application. See the Financial Section of this catalogue for complete explanation of fees.

The University reserves the right to terminate acceptance of application forms when enrollment limits are reached.

GENERAL REQUIREMENTS

The applicant must be at least sixteen years of age and of established good moral character. The University of Georgia complies with the Civil Rights Act of 1964.

TESTS REQUIRED

The College Entrance Examination Board's Scholastic Aptitude Test and the English Composition and Intermediate Mathematics Achievement Tests are required of all applicants.

Students who have had at least two years of foreign language in high school must take the College Board Achievement Test in that language.

Results of these tests must be filed with the Director of Admissions by the required date. Contact the Director of Admissions for the required dates for each registration period.

Information for making application to take the required tests may be obtained from the high school principal or counselor, or directly from College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey.

SPECIFIC REQUIREMENTS OF COLLEGES AND SCHOOLS

The applicant must have a minimum of 16 units from an accredited high school and meet the specific requirements of the college or school he wishes to enter. Specific course requirements of the several colleges and schools follow.

College of Arts and Sciences (except Bachelor of Science, Bachelor of Science in Chemistry, and Bachelor of Science in Physics curricula), College of Agriculture (except Bachelor of Science in Agricultural Engineering curriculum), College of

Business Administration, College of Education, School of Forestry, School of Home Economics, and School of Journalism.

		Units
Required Subjects		10
English	4	
Algebra	1	
Other mathematics	1	
Social studies	2	
Science	2	
*Optional subjects from Group A below		4
Optional subjects from Group B below		2
Total		16

Bachelor of Science, Bachelor of Science in Chemistry, and Bachelor of Science in Physics in the College of Arts and Sciences and Bachelor of Science in Agricultural Engineering in the College of Agriculture.

		Units
Required Subjects		12
English	4	
Algebra and Trigonometry	3	
Plane Geometry	1	
Social studies	2	
Chemistry	$\frac{1}{2}$	
Physics	$\frac{1}{2}$	
Other sciences	1	
*Optional subjects from Group A below		4
Optional subjects from Group B below		1
Total		17

OPTIONAL SUBJECTS

Group A	Group B
English	Other subjects for
Foreign Language	which credit is awarded
Mathematics	by accredited high schools.
Science	
Social studies	

Fractional credits of a value of less than one-half unit will not be accepted. Not less than one unit of work will be accepted in a foreign language.

The University reserves the right to reject credits from any high school or other institution, notwithstanding its accredited status, where the University determines, either from investigation or otherwise, that the quality of instruction available at such high school or institution is for any reason deficient or unsatisfactory.

WAIVING UNITS: The Director of Admissions or the Admissions Committee may take into consideration the overall high school scholastic record, scores of aptitude and achievement tests, personal data and personal recommendations in determining a waiver of one or more of the prescribed units.

*For students who expect to become candidates for a degree in the College of Arts and Sciences, two units in a foreign language are advisable.

GRADE AVERAGE

Applicants who qualify under the above unit requirements must have a predicted grade point average which indicates a potential to pursue effectively the educational program of the University. The predicted grade point average is based upon high school record, College Entrance Examination Board scores, and other pertinent data as determined by the Admissions Committee of the University.

PERSONAL REQUIREMENTS

Each applicant must give evidence of good moral character, promise of growth, seriousness of purpose, and a sense of social responsibility. The University reserves the right, in every case, to reject any applicant whose general records and attitude do not indicate success in the University environment, notwithstanding the completion of other requirements.

The University also reserves the right to examine further any applicant by the use of psychological, achievement, aptitude tests, and personal interview.

EVALUATION OF APPLICANT

If the application forms, CEEB Scholastic Aptitude Test scores, and other required records of the applicant are found to be complete and in proper order, the applicant will be evaluated in terms of his predicted grade point average, scholastic aptitude, biographical data, social and psychological adjustment, and the probability of his completing the requirements for the desired degree.

The Admissions Committee and/or the academic dean shall review any application directed to them by the Director of Admissions for total study and subsequent recommendation to the Director of Admissions.

Acceptance of each and every application will be determined by the Director of Admissions, subject to the right of appeal as provided in the University System.

ADMISSION OF HIGH SCHOOL JUNIORS

Under exceptional circumstances, students may be admitted to the University at the end of their junior year in high school. They must have outstanding records in college preparatory subjects and must present scores on the combined Verbal and Mathematics sections of the Scholastic Aptitude Test satisfactory to the University Faculty Admissions Committee. The recommendation of the student's high school principal will be considered by the Admissions Committee.

SPECIAL ADMISSIONS

Persons over 21 years of age and veterans whose secondary schooling was interrupted by military service may be admitted by presenting a State Department of Education Certificate of High School Equivalency, or by passing Entrance Examinations as determined by the Admissions Committee. In general, the General Education Development Tests, High School Level, will be used as a testing measure under this section. No student having attended secondary school during the previous twelve months will be eligible for admission by this method.

TRANSFER STUDENTS

Transfer students must comply with the foregoing regulations relative to admission procedures, requirements, and dates for filing the completed applications.

TRANSCRIPTS: The applicant must request that all official transcripts of studies pursued at any other colleges or universities be sent to the Director of Admissions. These transcripts must provide a statement of honorable dismissal. A student who is on probation or who has been dismissed from another institution because of poor scholarship or disciplinary reasons may not enter the University.

TESTS REQUIRED: Comprehensive-achievement tests may be required for students entering the junior class.

GRADE AVERAGES AND CREDITS: Transfer students must have an over-all average of C or better in their previous college work. They will be allowed to transfer not more than 20 per cent of the hours transferred in D grades.

The University reserves the right to limit the amount of transfer credit for courses with the lowest passing grade. Under no circumstances will credit be allowed for courses in Freshman English unless the grades received average C (73) or better.

College credit will not be allowed for such courses as remedial English and remedial mathematics or courses basically of secondary school level.

Credit for specific courses designated as "core curriculum" or "Major" courses will not be allowed unless grades received are above the lowest passing grade.

EXTENSION OR CORRESPONDENCE CREDITS

The amount of credit that the University will allow for work done in another institution within a given period of time may not exceed the normal amount of credit that could have been earned at the University during that time. A maximum of 105 academic quarter hours from a junior college, or 141 academic quarter hours from a senior college may be applied toward a degree; however, most programs at the University require a minimum of 90 quarter hours in residence.

The total number of hours that may be earned toward a degree at the University by either extension or correspondence courses or both shall not exceed one-fourth of the hours required for graduation. The University reserves the right to otherwise restrict the acceptance of the above mentioned type credits.

Credit is granted for satisfactory completion of the College Level, General Educational Development Tests. Students with prior credit in the field or a related field of the subject area involved will not be granted credit. The University does not administer these tests. In general they are administered by the Education Officer on military posts.

United States Armed Forces Institute (USAFI) courses are not recognized by the University unless they are completed through an accredited institution which grants recognized college credit for same. Such courses are regular correspondence courses and are administered under the Cooperating College Program of USAFI.

The University grants no credit for military service nor for military schools attended while in the service.

Inquiries concerning in-service training should be directed to the Registrar. Evaluations of this training will not be made until such time as the student registers for residence credit on the University campus.

EVALUATION OF TRANSFER APPLICANT

Transfer applicants will be evaluated, reviewed, accepted or rejected in the same manner as described for freshman applicants. The University also reserves the right

to deny admission to any transfer applicant when, in the opinion of the Director of Admissions, the academic standards or the admission procedures of any institution previously attended are not equivalent or comparable to those existing at the University.

GRADUATE AND PROFESSIONAL STUDENTS

Students in the professional programs, Law, Pharmacy and Veterinary Medicine, will have additional admission requirements to be found in the appropriate sections of the catalogue.

Students in graduate programs should consult the Graduate School Bulletin or a dean of the particular school or college for a list of requirements.

The University reserves the right to reject any applicant whose low record indicates that he is not adequately prepared to do college work even though he may meet the entrance requirements set forth above.

IRREGULAR STUDENTS

The policy of the University is not to allow students who can meet the entrance requirements (especially those under 21 years of age) to take irregular programs of work. Students who are granted special permission to pursue such a program will be classified as irregular students.

APPLICANTS FOR READMISSION

Students who are out of the University for one or more quarters (exclusive of the Summer Quarter) must make application for readmission no less than twenty (20) days prior to the published date of registration. Application for readmission forms will be provided by the Director of Admission upon request.

PHYSICAL EXAMINATIONS

All freshmen, transfers, and former students who have been absent from the University for over three quarters must have a fully completed physical examination form on file with the Department of Student Health at least ten days prior to registration. (Students entering for summer session only need not file a physical examination form.)

Physical examination blanks will be sent with notification or acceptance for admission. The examination performed by the student's family physician within three months prior to registration should include a report of a tuberculin test or a chest X-ray. The latter is required only if the tuberculin test is positive. The physician's opinion as to the student's capability to participate in ROTC and/or physical education is desired. The physician should mail completed forms to the Department of Student Health, Gilbert Memorial Infirmary.

Financial Information EXPENSES

ESTIMATED SUMMARY OF EXPENSES

The estimated annual expenses of a student at the University vary from \$1,200 to \$1,500. This estimate includes University fees and cost of books, military uni-

forms, room, board and laundry. It does not include travel, clothing, and incidental expenses.

Students of law, music, and veterinary medicine, and non-resident students will find the cost somewhat more because of higher fees required.

FEES AND EXPENSES

APPLICATION FEES \$10.00

Required of all new students applying for admission to the University. Pay by check or money order payable to University of Georgia. DO NOT SEND CASH. Covers expenses of processing application; may not be credited toward matriculation fee; is non-refundable. An applicant who fails to enroll for the quarter for which he is accepted must re-apply for admission, if he wishes to enter the University at a later date, and will be required to send an additional \$10 fee with his application.

FEE DEPOSIT — LAW SCHOOL \$50.00

Required of a new student accepted for admission to Law School in order to reserve his place in the class. Must be filed by April 1 of the year in which he seeks admission, or within thirty days of acceptance, whichever comes later. Deposit is non-refundable, but is applicable toward payment of the first quarter matriculation fees.

FEE DEPOSIT — SCHOOL OF VETERINARY MEDICINE \$50.00

Required from each applicant accepted for admission to the School of Veterinary Medicine. Must be received within three weeks after the date of issuance of the acceptance. If deposit is not received within the specified time, an alternate candidate will be called to fill the place of the accepted applicant. Deposit is non-refundable, but is applicable toward payment of the first quarter matriculation fees.

MATRICULATION (Maintenance, Health and Student Activity Fees) FEES FOR STUDENTS WITH 12 OR MORE QUARTER HOURS

Payable each quarter during registration period.

Regular students, Residents of the State of Georgia	\$111.00
Non-Resident Regular Students	\$111.00 plus \$140.00*
Forestry Students	\$114.00
Non-Resident Forestry Students	\$114.00 plus \$140.00*
Law Students	\$123.50
Non-Resident Law Students	\$123.50 plus \$140.00*
Music Majors	\$156.00
Non-Resident Music Majors	\$156.00 plus \$140.00*
(Covers private lessons, rental of instruments, practice and locker fees.)	
Veterinary Medicine Students	\$138.50
Non-Resident Veterinary Medicine Students	\$138.50 plus \$500.00*

*NON-RESIDENT TUITION FEE of \$140 (\$500 Veterinary Medicine) must be paid by every non-resident student in addition to the regular matriculation fees charged resident students.

MATRICULATION FEES FOR STUDENTS WITH LESS THAN TWELVE QUARTER HOURS

Payable each quarter during registration period.

Students who are residents of the State of Georgia	\$ 8.00 per quarter hour*
Law Students	10.00 per quarter hour*
Veterinary Medicine Students	11.00 per quarter hour*
Music Majors	12.00 per quarter hour*
Each student with less than twelve quarter hours must also pay the following:	
Health Fee	\$6.50
Student Activity Fee	9.50

MATRICULATION FEES FOR OTHER PROGRAMS

Payable each quarter during registration period.

Atlanta Area Teacher Education	
Service Program	\$12.00 per quarter hour (non-refundable)
Off-Campus Workshops	12.00 per quarter hour (non-refundable)
Saturday Class Program	8.00 per quarter hour

AUDITOR’S FEE

Persons desiring to attend courses or lectures without examination or credit may secure an auditor’s ticket. Fees for auditors are the same as those for students registered for credit.

BREAKAGE DEPOSITS AND SPECIAL FEES

There are no general laboratory fees, but a few courses require special fees, such as agronomy for cotton grading and field trips; forestry for forestry camp; landscape architecture for field trips; and music for private lessons. The catalogue description of a course indicates the amount of any special fee required.

There are no laboratory breakage deposit fee, however, students will be held responsible for any breakage they cause.

ARMED SERVICES UNIFORMS, FEES, AND TEXTBOOKS

Students enrolling in the Army or Air Force ROTC will be issued uniforms through the University as outlined below:

- a. Basic Cadets:
 - (1) Basic course students are issued uniforms and equipment on a loan basis. These uniforms will be retained by the cadet throughout the basic course, ROTC. Uniforms must be turned in to the ROTC Uniform Department, Hardman Hall, by the cadet upon completion of the basic course ROTC, or when he drops or is dropped from the army or Air Force ROTC.
 - (2) Basic cadets are required to make a \$50 uniform deposit at the time of registration. A fee of \$13.50 will be deducted from this amount to cover a \$2.50 account fee; \$2 for yearbook; \$2.50 for alterations, laundry and cleaning; and \$6.50 for shoes and socks which become property of the

*NON-RESIDENT STUDENTS with less than twelve quarter hours must pay a non-resident tuition fee of \$12 for each quarter hour of work taken. This is in addition to the quarter hour matriculation rates charged to resident students.

cadet. This will be a one time deduction so long as the deposit remains with the University.

b. Advanced Cadets:

- (1) Advanced cadets are issued "made to measure" uniforms upon entry into the advanced course. These uniforms become the property of the cadet if he completes the advanced requirements.
- (2) Rank insignia will be issued to the advanced cadet on a loan basis. All insignia must be returned to the supply section upon completion of the course, or upon leaving the University for any reason.
- (3) Advanced cadets are required to make a \$90 uniform deposit at the time of registration. A fee of \$4.50 is deducted from the amount to cover \$2.50 account fee and \$2 for the yearbook.

c. Charges:

All cadets are held personally responsible for all textbooks, uniforms, and equipment, and they must provide proper care and safeguards for these items. The cadet concerned will be assessed for the cost of any item lost, destroyed, or mutilated.

d. Refunds of Deposits:

Any refunds due to cadets on deposits will be made as soon as practicable after the cadet finishes the course or withdraws from the University. These refunds will be initiated by the military property custodian and remitted by the Treasurer's Office.

SPECIAL FEES AND CHARGES

SERVICE CHARGES FOR LATE REGISTRATION

First day beyond scheduled dates	\$ 5.00
For each additional day up to and including the fourth day	2.00

SPECIAL EXAMINATION FEE	\$ 2.00
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The University reserves the right to charge this fee for any special examination given at the request of a student.

TRANSCRIPT FEE

First copy	No Charge
Each additional copy	\$ 1.00

(Records prior to Summer, 1950, have been microfilmed and transcripts of these records are \$1 each, payable with the request.)

GRADUATION FEE

(Covers diploma cost, cap and gown rental, and hood for doctor's degree.)

Undergraduate degree	\$10.00
Master's degree	10.00
Doctor's degree	25.00
School of Veterinary Medicine	13.00
Certificate of American Studies for Foreign Students	5.00

GRADUATE RECORD EXAMINATION

Required of all graduate students before they are admitted to candidacy for a graduate degree	5.00
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METHOD OF PAYMENT

Payments should be made to the Treasurer's Office in the Academic Building on the north campus by either cash or check, or in the check depository in the Registration Hall by check only (no cash). If a check given for a student's bill is not paid on presentation to the bank on which it is drawn, the student's registration will be cancelled. If the registration is cancelled after the registration period for the quarter has expired, the student may re-register only on payment of the service charge.

Students are encouraged to have personal checking accounts for payment of fees and other expenses.

TIME OF PAYMENT

All student fees, deposits, and charges for room and board are due and payable at the time of registration with the following four exceptions:

1. Deferrals for students who have authorizations for payment of fees by outside agencies, including vocational rehabilitation students. Deferrals will be allowed only for the amount authorized by the agency for a specific academic quarter.
2. Deferrals for students who have loan or scholarship approvals in process. Deferrals will be allowed only for the amount of the loan or scholarship in process for a specified academic quarter.
3. Deferrals for foreign students who have a certificate or other acceptable documented evidence that payment of fees will be made after the University prepares a statement of charges for the student. Deferrals will be allowed for the amount stated in the certification for a specified academic quarter.
4. Deferrals for students who have University approved fellowships, assistantships, or stipends for the academic quarter in which the deferral is requested; however, not more than two-thirds of the assessed fees for a specified academic quarter can be deferred.

Due dates for deferred fees are as follows:

Fall Quarter	— November 1
Winter Quarter	— February 1
Spring Quarter	— May 1
Summer Quarter	— July 1

A student is not officially registered in the University until such fees and charges are paid. Students who do not make payment within the registration period will be required to pay the service charge for late registration.

FEE REFUNDS

Students who formally withdraw from the University within one week following the scheduled registration date are entitled to a refund of 80 per cent of the fees paid for that quarter; within a period from one to two weeks after the scheduled registration date, 60 per cent; within a period from two to three weeks after the scheduled registration date, 40 per cent; and within a period from three to four weeks after scheduled registration date, 20 per cent.

The following are not entitled to any refund of fees paid:

Students who withdraw after a period of four weeks has elapsed from the scheduled registration date.

Students suspended for disciplinary reasons.

Students who leave the University when disciplinary action is pending, or who do not formally withdraw.

Information on refunds of payment for room and meals is found under Campus Life, Housing.

Refunds will be made at the end of a quarter.

No refunds for reduction in hours are allowed unless such is the fault of the University.

RESERVATION OF RIGHT TO CHANGE FEES

The University reserves the right to make changes in its fees and charges at the beginning of any quarter and without previous notice. This right will be exercised cautiously.

STUDENT AID

SCHOLARSHIPS AND LOANS

The University's Office of Placement and Student Aid makes every effort to help deserving students obtain financial aid. This office has prepared a booklet on *Student Aid*, which lists all scholarships, awards and prizes made available to students of the various undergraduate and professional schools. Last year some 1,100 undergraduates were studying on scholarships. Some of these scholarships are administered by the University and others by individual sponsors.

In addition, there are more than 100 loan funds established by friends of the University. Sponsors of these funds include individuals, industries, civic and social organizations, trusts and estates. The Director of Placement and Student Aid administers the awarding of these loans under the policies of a faculty committee. A complete listing of these funds and eligibility requirements is included in the Student Aid booklet. A listing of major educational foundations which make loans is also included.

A student should make his financial plans well in advance of entering the University. He is advised to write to the Director of Placement and Student Aid requesting the Student Aid booklet at the same time that he makes application to the University. Most scholarship applications must be submitted by February 1 preceding September enrollment. Loan applications must be made at least one month before the quarter in which funds will be needed, and should be filed by July 1 for September enrollment.

Upon the approval of a loan or scholarship application by the Office of Placement and Student Aid, the Treasurer's Office will prepare the necessary records and disburse the funds to the student.

COLLEGE WORK-STUDY PROGRAM

The University participates in the Work-Study Program, jointly sponsored and financed by the University and the Federal Government. This provides many part-time jobs for students who can qualify. Information and application forms may be secured from the Office of Placement and Student Aid.

NATIONAL DEFENSE EDUCATION ACT LOAN PROGRAM

The University participates in the loan program sponsored by the U.S. Department of Health, Education, and Welfare. Funds are available to students who can demon-

strate need in line with the provisions set forth in the act. Applications may be secured from the Office of Placement and Student Aid. Upon approval of an NDEA loan application, the Treasurer's Office will disburse the funds and be responsible for collecting loans. The students having NDEA loans through the University should contact the Treasurer's Office prior to terminating his academic program.

VETERANS ADMINISTRATION EDUCATIONAL ASSISTANCE PROGRAMS

The Office of Placement and Student Aid advises with former service men and women who are eligible for benefits under the G. I. Bill, and with children of veterans who are permanently and totally disabled from service-connected causes or who died while so disabled. Veterans and children of veterans who are eligible for VA training allowance benefits must make application through the Veterans Administration and present a certificate for a program of education to the Office of Placement and Student Aid upon enrollment at the University.

The veteran or war orphan is advised to have money available to cover his first quarter's expenses when he enters school as government subsistence checks will not arrive for two or three months after his program begins.

STUDENT EMPLOYMENT

The Division of Student Affairs maintains through the Office of Placement and Student Aid a student employment service to assist students who wish to earn a part of their college expenses. Employment assistance also is given to wives of students.

Work opportunities occur in the libraries, dining halls, dormitories, some academic departments, and in town.

Because it is difficult to secure a job for a student before he arrives in Athens, a student should come to the University prepared to pay all expenses for at least his first quarter.

A student should not expect to be able to earn enough to pay all expenses. The regular academic program provides a full schedule of work for the average student. Those who take on a heavy schedule of outside work will find it necessary to carry a reduced academic load and to spend a correspondingly longer time at the University.

Entering The University

CHOICE OF SCHOOL OR COLLEGE

A student should register in the school or college in which his major interest lies. If he is undecided, he should register in the College of Arts and Sciences. Each school and college is described and explained completely in a separate section of this catalogue.

ORIENTATION

All new students will attend orientation prior to their enrollment. Freshman students who enter for the fall quarter are required to choose one session of a summer orientation program to visit the campus for general orientation, for academic advisement, and for registration. Orientation schedules will be sent to the student with his acceptance to the University.

REGISTRATION AND PENALTIES FOR LATE REGISTRATION

An applicant for admission whose credentials have been approved by the Director of Admissions but who does not register at the scheduled time should present himself at the Registrar's Office to receive information on registration procedure.

Registration dates are listed in the College Schedule and Calendar at the back of this catalogue. A student who fails to register on the scheduled days will be subject to penalties up to \$13 as listed in the Financial Information Section. No student will be admitted after the expiration of the fifth day beyond scheduled dates except by special permission.

REQUIREMENTS TO REGISTER AS A LEGAL RESIDENT

In order to register as a legal resident of Georgia at the University of Georgia, a student must establish the following facts to the satisfaction of the registering officer:

- (a) A student who is under 21 years of age at the time he seeks to register or re-register at the beginning of any quarter will be accepted as a resident student only upon verification by him that his supporting parent or guardian has been legally domiciled in Georgia for a period of at least twelve months immediately preceding the date of registration or re-registration.
- (b) In the event that a legal resident of Georgia is appointed as guardian of a non-resident minor, such minor will not be permitted to register as a resident student until the expiration of one year from the date of appointment, and then only upon proper verification that such appointment was not made to avoid the non-resident fee.
- (c) If a student is over 21 years of age, he may register as a resident student only upon showing that he has been domiciled in Georgia for at least twelve months prior to the registration date.
Any period of time during which a person is enrolled as a student in any educational institution in Georgia may not be counted as a part of the twelve months' domicile and residence herein required when it appears that the student came into the State and remained in the State for the primary purpose of attending a school or college.
- (d) A full-time faculty member in an institution of the University System, his or her spouse, and minor children may register for courses on the payment of resident fees, even though the faculty member has not been in residence in Georgia for a period of twelve months.
- (e) If the parents or legal guardian of a minor changes residence to another state following a period of residence in Georgia, the minor may continue to take courses for a period of twelve consecutive months on the payment of resident fees. After the expiration of the twelve months' period, the student may continue his registration only upon the payment of fees at the non-resident rate.
- (f) Military personnel stationed in Georgia, and their dependents, may become eligible to enroll in institutions of the University System as resident students provided they file with the institution in which they wish to enroll the following materials:

- (1) A statement from the appropriate military official as to the applicant's "Home of record";
 - (2) Evidence that applicant, if over 21 years of age, is eligible to vote in Georgia;
 - (3) Evidence that applicant, if under 21 years of age, is the child of parents who are eligible to vote in Georgia;
 - (4) Evidence that applicant, or his parents, filed an income tax return in Georgia during the preceding year;
 - (5) Other evidence showing that a legal domicile has been established in Georgia.
- (g) Foreign students who attend institutions of the University System under the sponsorship of recognized civic or religious groups may be enrolled upon the payment of resident fees, provided the number of such foreign students in any one institution does not exceed the quota approved by the Board of Regents for that institution.
- (h) All aliens shall be classified as non-resident students; provided, however, that an alien who is living in this country under a visa permitting permanent payment of resident fees, and provided the number of such foreign students in any one institution does not exceed the quota approved by the Board of Regents for that institution.
- (i) Teachers in the public schools of Georgia and their dependents may enroll as students in University System institutions on payment of resident fees when it appears that such teachers have resided in Georgia for nine months, that they were engaged in teaching during this nine months' period, and that they have been employed to teach in Georgia during the ensuing school year.
- (j) In the event that a woman who is a resident of Georgia and a student in an institution of the University System marries a non-resident of the State, the woman will continue to be eligible to attend the institution on payment of resident fees, provided that her enrollment is continuous.
- (k) If a woman who is not a resident of Georgia marries a man who is a resident of Georgia, the woman will not be eligible to register as a resident in a University System institution until she has been domiciled in the State of Georgia for a period of twelve months immediately preceding the date of registration.
- (l) Non-resident graduate students who hold assistantships that require at least one-third time service may register all assessed fees on a resident basis.

Campus Life

HOUSING

Residence halls at the University accommodate approximately 6,800 students. Another 1,600 students live in fraternity and sorority houses. Approximately 530 student families live in University married student housing. More than 5,000 students rent housing in the City of Athens or commute.

Inquiries on student housing should be addressed to the following offices:

Main Office of Department of University Housing, Russell Hall—responsible for overall housing program and student housing in residence halls, fraternities and sororities.

Married Student Housing Office, South Campus—responsible for on-campus married student housing.

Off-Campus Housing Office, South Creswell Hall, ground level—responsible for all aspects of off-campus housing.

WOMEN STUDENTS

Except for those who meet one of the following criteria, all women students are required to live in a University residence hall or sorority house: (1) married; (2) graduate student, or enrolled in the colleges of Veterinary Medicine, Pharmacy, or Law and have accumulated 185 hours with a 73 average; (3) twenty-three years of age; (4) have written parental permission to live with close relatives (mailed in advance to and approved by the Dean of Women); or (5) living at home with parents.

MEN STUDENTS

All freshman men under twenty-one are required to live for one year in a University residence hall, except the following: veterans, married men, and those living with parents or relatives. Those who plan to live with close relatives must obtain advance approval from the Dean of Men.

Men students must be of sophomore standing or above to be eligible to live in a fraternity house, unless special permission has been obtained from the adviser of fraternities.

RESIDENCE HALLS

How to Apply

Applications for single men's and single women's housing are mailed to new students with their official notice of acceptance to the University. The application and housing deposit should be returned within twenty-one days of the date of official acceptance. Housing is guaranteed for all under-graduate single women students and freshman men who meet this deadline.

Students who are returning to the University after an absence of a quarter or more, or who have not lived in University residence halls for the preceding quarter, may obtain an application from the Office of University Housing.

ASSIGNMENT OF ROOMS

Students may indicate on their housing application their preference for specific residence halls and roommates. These will be honored providing that 1) space is available, 2) students requesting to room with each other mail their applications and room reservation fees in the same envelope, and 3) the requests do not require that exceptions be made to existing assignment procedures.

Building assignments for the fall quarter are mailed to new students on or before July 15. Assignments for the winter and spring quarters are mailed on or about December 1, and March 1 respectively.

Roommate and room assignments will be available upon arrival at the assigned hall on opening day. Students who do not receive their preference should ask their residence hall counselors or house directors about the possibility of room changes after the beginning of the quarter.

RATES

Women's Halls and Quarterly Rates

Church, Clark Howell, Creswell, Hill, Lipscomb, Mary Lyndon, Myers, Rutherford, Soule	\$101.00
Boggs, Mell	111.00
Brumby	121.00

Private rooms cost an additional \$25 per quarter, except in Boggs, Mell, or Brumby Halls where they are as follows: Boggs—\$35, Mell—\$35, and Brumby—\$45.

Suites are available in Center Meyers and Mary Lyndon halls and cost the resident an additional \$5 per quarter.

Men's Halls and Quarterly Rates

Dudley	\$ 76.00
Joe Brown, Milledge, Morris, Payne, Reed, Tucker	101.00
Russell, McWhorter	121.00

Private rooms cost an additional \$25 per quarter, except in Russell Hall where they are \$45 extra.

FEES AND DEPOSITS

An \$80 advance room reservation deposit is required if the student is applying for his first quarter at the University, or if he was not at the University the entire preceding quarter. This fee is not required for the summer quarter.

Students who continue to live in University residence halls from one quarter to the next are not required to pay an advance deposit, except for the fall quarter when an advance deposit of \$25 is required.

Students who apply to move into University housing from off-campus housing, sorority or fraternity houses during any quarter must pay the \$25 advance deposit.

Deposits must be paid by check or money order made payable to the University of Georgia and must be submitted along with the housing application.

The full deposit is credited toward payment of rent for the quarter for which the deposit is made. Where rental rates exceed the amount of the deposit, the balance is payable at registration.

A key deposit of \$1 is required when the student checks in at a residence hall and is refunded when the key is returned.

CANCELLATION OF APPLICATIONS

Of the room reservation deposit described above, \$25 is non-refundable and non-transferable. The balance is refundable under the following conditions:

Cancellation notices regarding residence hall applications must be submitted in writing to the Director of University Housing. The cancellation notice must be post-marked not later than June 30 for fall quarter, November 30 for winter quarter, or

February 28 for spring quarter. If the notice is delivered in person, it must arrive at the Housing Office not later than 5:00 p.m. on the dates listed.

RESPONSIBILITY FOR OCCUPANCY

If a student does not appear to occupy his assigned space in a University residence hall, or if official notification of a delay is not filed by 9:00 a.m. on the day after classes begin, the University reserves the right to cancel the reservation and assign the space to another student.

Once a student obtains an assignment, he is obligated for the full quarter's rent whether he occupies the room or not. The only exception is if a student withdraws from the University.

REFUNDS UPON WITHDRAWAL

Students withdrawing from the University automatically forfeit \$25 of their room rent. The remainder of the room rent is refunded in accordance with the following schedule: (a) 80 per cent if withdrawal is made within one week after the regular registration date of the applicable quarter as published in the general catalog; (b) 60 per cent if within one to two weeks; (c) 40 per cent if within two to three weeks; and (d) 20 per cent if within three to four weeks. No refunds are made after four weeks from the date of registration. Neither is a refund of rent made to any student who is suspended or expelled from the University for disciplinary reasons. Checks for refunds are mailed at the end of the quarter.

FURNISHINGS AND SERVICES

Student rooms are equipped with beds, chairs, study tables, dressers or chests of drawers and clothes closets. Students furnish their own pillows, linen, blankets, towels, lamps, rugs, etc. Cooking appliances, sun lamps, television sets, electric irons, refrigerators, and air conditioners may not be used in the bedrooms.

There are room telephones in Brumby, Boggs, Mell, Russell and McWhorter. Local service is included in the room rent; long distance charges are billed to the student by the telephone company.

Brumby, Russell and McWhorter halls are air conditioned.

Weekly laundry service for flat work is provided by the University and included in the room rent.

FOOD SERVICE

The University operates three food service facilities on campus.

Bolton Hall is a modern cafeteria conveniently located on Baxter Street. A variety of food and three meals a day are offered on the six serving lines in this cafeteria. Meal tickets for two or three meals a day are sold each quarter for \$138.00 and \$175.00 respectively. Meals may be purchased also on a price per item basis.

Snelling Hall located on South Campus will be remodeled to offer regular cafeteria service and short order, snack bar type service on a cash basis. Three meals a day are served.

The Bulldog in Memorial Hall is a popular gathering place for between class breaks, lounging or studying. Students may purchase a wide variety of short orders including breakfast, sandwiches, charred hamburgers and steaks. This facility is open from 7:00 a.m. until 10:00 p.m. for the convenience of students and faculty.

OPENING AND CLOSING OF RESIDENCE HALLS

University residence halls open at 10:00 a.m. on the day prior to the first day of orientation and close at 10:30 a.m. the day after the last scheduled examination at the end of a quarter. During official holidays within a quarter, the University reserves the right to close certain halls and require students remaining on campus to move temporarily to another hall.

RESPONSIBILITIES FOR UNIVERSITY AND STUDENT PROPERTIES

Resident students are held responsible for any damages to their rooms and furnishings. Damages will be assessed by the University and the student will be billed for repairs or replacements. Students should inform University officials of any damages which exist at the time they occupy their rooms.

Although every precaution is taken to maintain adequate security, the University cannot assume the responsibility for the loss of or damage to student possessions. The University reserves the right to change its fees, charges, rules and regulations at the beginning of any quarter and without previous notice.

MARRIED STUDENT HOUSING

How to Apply

Applications may be obtained from the Manager of Married Student Housing. Married students may apply for housing before they are admitted to the University, but assignment will not be made until they have been notified of their official acceptance.

ASSIGNMENT

Assignment is made from a waiting list established according to the date applications are received by the Manager of Married Student Housing. Priority is given to families with children.

DEPOSITS AND REFUNDS

A security deposit of \$25 is required with the application. The full \$25 will be refunded if the applicant cancels his application before an assignment is offered, or at the end of his occupancy less any necessary deductions. The University reserves the right to use all or any part of the deposit to defray cost of cleaning the unit, repair of damages or replacement of equipment, or payment of any unpaid University bills.

FACILITIES AND RATES

Pre-Fabricated Units are temporary unfurnished residences renting from \$25 to \$32 per month, depending on whether they are an efficiency or a one, two, or three bedroom unit. Rates include water; additional utilities are extra. Furniture may be rented from the University at a reasonable rate.

University Village Apartments are air-conditioned and electrically heated one and two bedroom units that rent for \$60 and \$72 per month, respectively. Rates include water; additional utilities are extra. A limited number of furnished apartments are available at an extra cost of \$12 per month.

OFF-CAMPUS HOUSING

The Off-Campus Housing Office is a referral and advisory agency, operating a rental listing service. The office does not make rental reservations or negotiate directly with householders in behalf of prospective tenants.

Up-to-date lists of available rental units in the Athens area may be picked up at the Office at any time. These lists are not mailed to inquirers due to frequent changes which make them outdated.

The Handbook for Off-Campus Students, available upon request, provides helpful hints on renting and related matters.

REGULATIONS

VEHICLES

Freshman students residing on campus are not permitted to operate or possess an automobile in Clarke County. All other students may purchase parking permits for parking in specified student areas. All vehicles operated on campus are subject to University Traffic Regulations. The right of a student to operate and/or possess a vehicle is considered by the University to be a privilege which may be revoked for cause at any time. Students who have a car but do not desire to bring it on campus must register same with the Department of Traffic and Security. All car registrations require proof of current liability insurance.

CONDUCT

A student is expected to show under all circumstances a proper respect for law, order, morality, consideration for the rights of others, and such a sense of personal honor as is demanded of good citizens. He is expected to realize that gambling, irresponsibility in money matters, cheating, dishonesty and lying, immorality, the use of illegal drugs, and the abuse or immature use of alcohol is not acceptable behavior, whether on the campus or in the community. Unsatisfactory conduct or misbehavior will subject a student to disciplinary action, whether such occurs on or off campus.

SOCIAL PROBATION

For any serious or repeated infraction of regulations, a student or group may be placed on social probation, which indicates that any further infraction of regulations may cause more drastic disciplinary action to be taken, including possible suspension.

University officials reserve the right to exclude a student at any time whose action, conduct, or status is deemed to be improper or prejudicial to the interests of the University community.

The University further reserves the right to ask the withdrawal of any student involved in a court case, pending the trial.

STUDENT SERVICES

STUDENT COUNSELING

The University attempts to maintain a close personal association between student and faculty. Each teacher and academic dean has the responsibility of guiding each student in problems of an academic nature. Counseling other than academic

is provided by the offices of the Dean of Men and the Dean of Women and the Guidance Center.

Special counseling assistance concerning academic or professional progress hindered by problems of an educational, vocational, or personal nature is available through the staff of the Guidance Center. A confidential relationship with a professional counselor is available for assistance in selecting a major field of study, in planning for a future occupation, in handling problems of adjusting to college life and in other personal-social matters. All services of the Guidance Centers are available free to enrolled students.

The Office of Placement and Student Aid offers financial assistance and career placement services to all students. Student Aid includes loans, scholarships, summer and part-time employment, and Veterans Administration Education Assistance Programs. The service of the Psychology Clinic and the Speech and Hearing clinic offer specialized services coordinated with the services of the Division of Student Affairs.

STUDENT HEALTH SERVICE

The Gilbert Memorial Infirmary, financed by Judge Price Gilbert in 1940, houses facilities for the protection and care of the health of University students. Students are urged to visit the infirmary during regular hours which are 9:00 a.m. to 4:00 p.m. weekdays and until noon on Saturdays. Nurses are on duty 24 hours. Student health needs after regular hours will be met by the physician on call, as deemed necessary. Psychiatric evaluations are provided when necessary.

The student health fee covers all medicine, surgical supplies and service. It does not cover consultation by specialists, surgical operations, special nursing or dental care, and general local hospital care. An insurance plan at a cost of \$17 a year is available to cover these expenses. Foreign students must obtain some form of health insurance approved by the University officials. Applications are available at the infirmary.

All patients are treated as soon as possible and by infirmary personnel if possible. If special attention is needed, the student will be transferred to a local hospital at his cost. A charge of \$2.50 per day, payable when the student is released, covers the cost of meals and bed linens at the infirmary.

Other services such as a weekly surgical clinic by specialists and special attention in medical care by local physicians are available in some cases. Parents are notified when a serious illness and need for outside hospitalization is evident. An X-ray and clinical laboratory is available for diagnostic studies.

PLACEMENT SERVICES

The Office of Placement assists students and graduates in securing business and professional positions, government employment and teacher appointments through its contacts with potential employers. The office also works closely with deans of the professional schools in the placement of graduates.

Any student or graduate is eligible for placement assistance, and all seniors and graduate students are urged to have personal interview with the Director or a member of the professional staff of Placement and Student Aid.

A summer placement bureau is maintained to assist students and graduates to locate summer jobs in camps, resorts and industry.

STUDENT ACTIVITIES

UNIVERSITY LECTURE SERIES

Several distinguished speakers and artists are brought to the University each year to offer students an opportunity to attend programs by leading figures in the artistic, literary and scientific fields.

ART, DRAMA AND MUSIC ACTIVITIES

Art activities include a series of art lectures and exhibitions presented throughout the year by the Department of Art, student trips and exhibitions of student work presented by the Art Students League, and an annual auction of faculty and student work sponsored by the League and the Department of Art for the benefit of the Fund for the Advancement of Art.

All students are eligible to participate in the quarterly major productions of the University Theatre of the Department of Speech and Drama. Outstanding professional companies also appear on the campus.

The Department of Music presents each Thursday evening the Music Appreciation Hour featuring faculty members, advanced students and guest artists. Other music activities include the Men's Glee Club, Women's Glee Club, University Chorus, Symphony Orchestra, and the University Band. Those programs are free to all enrolled students and the public generally.

ATHLETIC PROGRAM

The University encourages students' interests in sports through a program of inter-collegiate athletics and intramural sports.

Intercollegiate athletic program for men includes football, basketball, baseball, track, tennis, golf, swimming, cross-country, and rifle marksmanship. Men's intramural sports include touch football, basketball, softball, golf, tennis, track, badminton, swimming, horseshoes, volleyball, and bowling.

The women's intramural sports program sponsored by the Department of Physical Education for Women and the Women's Athletic Association includes volleyball, swimming, horseshoes, golf, basketball, bowling, table tennis, badminton, softball, tennis and archery.

FORENSIC ACTIVITIES

Three debating societies offer the stimulation of intersociety debates and orations: Demosthenian Literary Society, Phi Kappa Literary Society (for men), and Agricultural Club (for agricultural students). The University also sponsors University-wide debating teams, open to men and women students, which engage other outstanding college teams. The sponsoring academic area for the debate teams is the Department of Speech and Drama, through the Georgia Forensic Association.

RELIGIOUS ORGANIZATIONS

Students may participate in the religious programs of Athens churches and in student organizations sponsored by all major faiths and denominations. Many of these maintain student religious centers. The Student Activities Office works with Center Directors and assists them with special projects for major religious events. The coordinating group for the various religious centers is the Student Inter-faith Council.

SOCIAL FRATERNITIES AND SORORITIES

A wide program of social functions are provided by men's Greek letter fraternities, women's Greek letter sororities, and other social clubs and societies.

FRATERNITIES

Acacia
Alpha Epsilon Pi
Alpha Gamma Rho
Alpha Tau Omega
Chi Psi
Delta Chi
Chi Phi
Delta Tau Delta
Farmhouse
Kappa Alpha
Kappa Sigma
Lambda Chi Alpha
Phi Delta Theta
Phi Epsilon Pi
Pi Gamma Delta Colony
Phi Kappa Tau
Phi Kappa Theta
Pi Kappa Alpha
Pi Kappa Phi
Sigma Alpha Epsilon
Sigma Chi
Sigma Nu
Sigma Phi Epsilon
Sigma Pi
Tau Epsilon Phi
Theta Chi

SORORITIES

Alpha Chi Omega
Alpha Delta Pi
Alpha Gamma Delta
Alpha Omicron Pi
Alpha Xi Delta
Chi Omega
Delta Delta Delta
Delta Gamma Colony
Delta Phi Epsilon
Delta Zeta
Kappa Alpha Theta
Kappa Delta
Kappa Kappa Gamma
Phi Mu
Pi Beta Phi
Sigma Delta Tau
Sigma Kappa
Zeta Tau Alpha

STUDENT CENTER

Recreational facilities and activities available at the Student Center in Memorial Hall include table tennis, billiards, a lounge with television and radio, special musical and film programs, and student socials. The Student Center is operated by a Student Center Board of interested students.

STUDENT PUBLICATIONS

Student publications include two of general interest, *The Red and Black* (bi-weekly newspaper) and *Pandora* (the yearbook). Other publications sponsored by schools, colleges or organizations include *Georgia Agriculturist* (monthly magazine in the College of Agriculture) *Cypress Knee* (publication of the School of Forestry), *The Georgia Clover Leaf* (yearbook of 4-H Clubs), *Georgia Agricultural Engineer* (yearbook of the Department of Agricultural Engineering), *The Georgia Dairyman* (publication of the Dairy Science Club), *The Georgia Pharmacist* (quarterly publication

in the School of Pharmacy), and *The Southeastern Veterinarian* (quarterly publication of the School of Veterinary Medicine) and *The Georgia Impression*.

STUDENT ACTIVITY GROUPS

A great number of professional and honorary fraternities and sororities, interest clubs, honor clubs and student government groups exist on the University campus. A detailed listing may be found in the Student Handbook.

Academic Program

DEGREES OFFERED BY COLLEGES AND SCHOOLS OF THE UNIVERSITY

The University offers courses of instruction leading to the following degrees:

1. In the College of Agriculture, the degrees of Bachelor of Science in Agriculture, Bachelor of Science in Agricultural Engineering, Bachelor of Science in Landscape Architecture, and Bachelor of Landscape Architecture.
2. In the College of Arts and Sciences, the degrees of Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science, Bachelor of Science in Chemistry, and Bachelor of Science in Physics.
3. In the College of Business Administration, the degree of Bachelor of Business Administration.
4. In the College of Education, the degree of Bachelor of Science in Education.
5. In the School of Forestry, the degree of Bachelor of Science in Forestry.
6. In the School of Home Economics, the degree of Bachelor of Science in Home Economics.
7. In the School of Journalism, the degree of Bachelor of Arts in Journalism.
8. In the School of Law, the degree of Bachelor of Laws.
9. In the School of Pharmacy, the degree of Bachelor of Science in Pharmacy.
10. In the School of Veterinary Medicine, the degree of Doctor of Veterinary Medicine.
11. In the Graduate School, the advanced general degrees of Master of Arts, Master of Science, and Doctor of Philosophy; and the advanced professional degrees of Master of Education, Master of Forestry, Master of Home Economics, Master of Art Education, Master of Music Education, Master of Landscape Architecture, Master of Fine Arts, Master of Agricultural Extension, Master of Public Administration, Master of Social Work, and Doctor of Education.
12. In the Graduate School of Business, the degrees of Master of Business Administration and Master of Accountancy.

MILITARY COMMISSIONS

A student who satisfactorily completes the advanced ROTC program may be awarded a commission as Second Lieutenant in the U. S. Army or U. S. Air Force in conjunction with the degree.

TWO DEGREES

A graduate of any program may receive the baccalaureate degree of any other program by completing the additional studies required in that program and by meeting residence requirements for the second baccalaureate degree.

GENERAL INFORMATION AND REGULATIONS

THE COLLEGE YEAR

The college year is divided into four quarters of approximately eleven weeks each. They run as follows: fall quarter, latter part of September to Christmas holidays; winter quarter, first week in January to middle of March; spring quarter, March to early June; summer quarter, June to latter part of August. Exact quarter dates appear in the University calendar.

Students may enter the University at the beginning of any quarter.

Degrees are conferred at close of the spring and summer quarters. Students completing their work in December or March may request and receive a certificate stating that all degree requirements have been satisfied. They will receive their diplomas in June.

UNITS OF CREDIT

The unit of credit is the quarter hour. A quarter hour represents one hour of class work per week for one quarter or its equivalent in other forms of instruction. Two or sometimes three hours of laboratory work are considered as the equivalent of one hour of class work.

The majority of University courses meet five times per week for one quarter, and such courses carry a credit of 5 quarter hours.

CLASSIFICATION OF STUDENTS

In the undergraduate schools and colleges a student will be classified according to the number of academic quarter hours he has completed with an average grade of C or better.

<i>Classification</i>	<i>Hours Completed</i>
Freshman	Less than 45 hours
Sophomore	At least 45 hours
Junior	At least 90 hours
Senior	At least 135 hours

JUNIOR DIVISION AND SENIOR DIVISION

Some of the undergraduate schools and colleges further classify their students as Junior Division students or Senior Division students.

In general, a Junior Division student is a freshman or sophomore. He has completed less than 90 academic hours. A Senior Division student is a junior or senior. He has completed at least 90 academic hours.

COURSE NUMBERS

Courses numbered from 1 to 99 are either non-credit or remedial courses; those

from 100 to 199 are designed for freshman and sophomore (junior division) students; those numbered 200 to 299 are mainly sophomore courses but, in special instances when justified by course and curricular requirements, may be given senior division (junior and senior) classification. Courses numbered 300 to 399 are offered primarily for junior and senior students; courses taken by juniors and seniors along with graduate students carry the numbers 400 to 599 for undergraduates and 600 to 799 for graduate students. Courses numbered 800 to 999 are offered only for graduate students.

With the approval of the dean of his college or school, a student may include in his sophomore program as much as one-third of his work in courses falling within the freshman-sophomore group.

GRADING SYSTEM

Quarter grades are reported by alphabetical letter only, although they are commonly based on averages of numerical grades given on daily work and final examinations. In figuring numerical averages the Registrar's Office uses the digit 8 for + grades and 3 for the letter only. The scale of letter grades is as follows:

- A+ 95-100 Exceptional
- A 90- 94 Excellent
- B+ 85- 89 Very Good
- B 80- 84 Good
- C+ 75- 79 Average
- C 70- 74 Fair
- D+ 65- 69 Poor
- D 60- 64 Very Poor
- E Condition
- F Failure
- I Incomplete. This grade indicates that although a student was doing satisfactory work he was unable to complete the course for some reason beyond his control.
- W This grade indicates that the student was permitted to withdraw from the course and that no grade was assigned.
- WF This grade indicates that the student was permitted to withdraw from the course while doing unsatisfactory work. The dropping of a course under these circumstances is equivalent to a failure.

CHANGE IN GRADES

A grade in a course reported by the instructor to the Registrar and recorded cannot be changed except in the following circumstances:

E may be changed to D if so reported by the instructor within twelve months.

I may be changed to any grade if so reported by the instructor within twelve months.

Any grade will be changed upon a written statement by the instructor that the grade was a factual error.

A senior in line for graduation who makes a grade of F or D in his senior year in a course numbered 200 or above necessary for his degree will have the privilege of one re-examination, provided there is no opportunity to repeat the course. Grades

in not more than two courses may be thus changed. Permits for a re-examination should be obtained from the Registrar's Office.

GRADE REPORTS

At the close of each quarter, reports of student's grades will be mailed to parents or guardians. For freshmen, a report will be made after the first six weeks of the fall quarter.

Reports will also be made to the parent regarding any official action that places a student on probation or excludes him from the University.

MISCELLANEOUS ACADEMIC REGULATIONS

HIGH SCHOOL SUBJECTS NOT TO BE DUPLICATED

No University credit will be granted for work in mathematics or other courses, except for special provision applicable to foreign languages, taken at the University when such work is a repetition of studies already completed in high school. A student continuing a foreign language taken in high school will be placed in an appropriate course on the basis of placement tests and other pertinent information.

FORFEITURE OF CREDIT

By registering for a course for which he has already received credit either by work at the University or by transfer of credits from another institution, a student forfeits the previous credit in that course. The student's final grade in the course will be the one made on the repetition.

NO EXTENSION WORK BY RESIDENT STUDENTS

Extension or correspondence work for University credit may not be taken by a student while registered as a resident student, except in extraordinary cases and when authorized by the dean of the college or school as a part of the student's normal load of course work.

REGISTRATION FOR COURSES

Any student classified as a junior or senior must give priority at registration to all uncompleted freshman and sophomore courses required for his degree before continuing the major subjects or electives.

ADMISSION TO EXAMINATION IN A COURSE TAKEN IN THE UNIVERSITY

A student who has not registered for the course will not be admitted to the final examination, and only under extraordinary circumstances will he be admitted to the examination unless he has attended at least 50 per cent of the total class and laboratory exercises held in the course.

AUDITING A COURSE

Persons desiring to attend courses or lectures without examination or credit may secure an auditor's ticket. Fees for auditors are the same as those for students registered for credit.

CLASS ATTENDANCE

All students are expected to attend regularly the meetings of classes in courses for which they are registered. A student who incurs an excessive number of absences may be placed on probation or dismissed from the University.

WITHDRAWAL FROM THE UNIVERSITY

No student is permitted to withdraw from the University after registration for a term without notifying the Dean of Men or Women, who shall notify the proper University officials. A student withdrawing from the University is expected to secure his parents' consent. Veterans receiving allowances under any of the acts of Congress must also notify the Director of Placement and Student Aid. Refunds will be based on the date of such notification.

A student against whom disciplinary charges are pending will not be permitted to withdraw from the University until such charges shall have been resolved.

In general, a student voluntarily withdrawing may return later if scholastically eligible.

SCHOLASTIC PROBATION

A student who fails to make an average of 70 in any quarter shall be placed on probation for the next quarter in residence unless he has a cumulative grade average of 78 on all work taken at the University. A student remains on probation until he makes an average of at least 73, carrying a minimum of 12 quarter hours (except graduating seniors) during one quarter in residence.

A student may remove himself from probation during a summer quarter. No student will be placed on probation on the basis of his work in a summer quarter, but summer quarter grades will be reflected in the cumulative grade average.

No student will be credited with the completion of the requirements for graduation while on probation. A student on probation shall not be allowed to register for a fall quarter.

DISMISSAL

A student shall be dismissed (1) if he fails to make an average of 60 during one quarter (except summer quarter), (2) if he is on probation for two consecutive quarters and fails to remove himself from probation during the second quarter.

A student dismissed for the first time may return on probation any quarter except a fall quarter with the approval of his dean and upon satisfactory completion of readmission tests at the University Guidance Center. One calendar year after a second dismissal, a student may petition the Faculty Executive Committee of the University for readmission if he can convincingly exhibit that he has had a change of attitude toward his academic responsibilities. Such permission is rarely given.

Students who decline, after consultation with appropriate ROTC and University officials, to fulfill the terms of their ROTC deferment agreements pertaining to undergraduate work at the institution will be dismissed immediately.

ACADEMIC ADVISEMENT

Students placed on probation should seek the assistance of their academic adviser as soon as possible. Those with poor scholastic records are advised that unless

their record improves markedly in the following quarter they should withdraw from the University.

ADMISSION TO ANOTHER COLLEGE OR SCHOOL

A student on probation or on first exclusion in one college or school within the University may not transfer to another college or school without the consent of the dean of the college to which admission is sought.

ELIGIBILITY FOR STUDENT ACTIVITIES

Twelve hours per quarter is the minimum normal load for any student participating in student activities.

A student on scholastic probation is not eligible to participate in any major student activity, represent the University or student body in any official capacity, or serve as an officer of any student organization.

Students participating in intercollegiate athletics must meet all scholarship requirements of the Southeastern Conference.

Students on social probation or warning may be restricted from participation in general student activities or social life.

MISCELLANEOUS REGULATIONS

CHANGES IN COURSES

Changes in a student's program of courses may be made only with the approval of the dean of the college or school in which the student is registered. Changes will not be permitted unless requested during the first four days of the quarter. A service fee of \$2 may be assessed for each change, though no charge will be imposed for changes made necessary by University regulations.

DROPPING OF COURSES

A student may not drop a course without the permission of the dean of his college or school. Veterans receiving benefits must notify the Director of Placement and Student Aid of course load reductions.

The procedure for dropping a course is initiated in the Dean's office, except in cases where the instructor wishes to drop with a grade of WF a student who has had excessive absences.

Except in special cases a student will not be permitted to drop to less than a normal load of 16 academic hours. A student who drops to less than 16 hours of work after the first five days of the quarter will normally receive a grade of WF on the course or courses dropped.

Students registered for extra hours, may be permitted by the Dean to drop to a normal load, but if the course is dropped after the first five days of the quarter and the grade received is W, the student forfeits for the next quarter the right to apply for extra hours.

A grade of W signifies that the student was passing the course at the time he withdrew. Such a grade, even if the course was dropped for medical reasons, does not relieve the student from the regular Probation and Exclusion rules. See Scholastic Probation and Dismissal Rules.

ACADEMIC WORK LOAD

The normal load of work for freshman and sophomore students is 16 hours per quarter. The normal load of work for junior and senior students is 15-18 hours per quarter except where otherwise stated in the published degree requirements. Veterans must carry 14 hours per quarter to draw full subsistence.

VARIATION FROM NORMAL WORK LOAD

The dean of a school or college may, at his discretion, authorize the following variations from the normal work load:

1. A minimum load of 10 hours. Except in special cases, a student will not be permitted to drop a load less than 16 hours. A student who drops to less than 16 hours after the first five days of a quarter will normally receive a grade of WF in the course or courses dropped.
2. An increase of from 1 to 3 hours: (1) when advanced ROTC is taken or when difficulty in making a practical schedule or a satisfactory program demands it; (2) students who had an average of B on the work of the three preceding quarters may have this privilege during the succeeding three quarters; (3) students who had an average of B in the preceding quarter may have this privilege the succeeding quarter.
3. A maximum of 22 hours may be permitted: (1) students on the current Dean's List; (2) students not on the Dean's List but who had an average of A on the work of the preceding quarter; (3) first year transfer students who receive an average grade of A on their last year's work in the institution from which they transferred; (4) students having 90 academic hours credit with no grade lower than C for the preceding three quarters. (No student with less than 15 hours in residence is eligible.)
4. An increase of 10 hours (distributed over their last three quarters): for seniors who, at the beginning of any quarter, can be graduated in three quarters by using this privilege.

Under no circumstances may a student receive credit for more than 22 hours per quarter.

REMEDIAL COURSES

Students showing a deficiency in mathematics or in reading ability may be required to take certain remedial non-credit courses.

SPECIAL COURSE IN READING AND STUDY SKILLS, PSYCHOLOGY 99

This course is required of all freshmen designated on the basis of placement tests. Designated freshmen will not be admitted to the second quarter of freshman English until satisfactory completion of this course is reported by the instructor. With the approval of the instructor, students not included on this list but referred by faculty members, may register for the course. Such students will not exceed one-fourth the size of the class.

SCHOLASTIC ACHIEVEMENT

ADVANCED PLACEMENT

Students who enter the University with good records on the Advanced Placement Program of the College Entrance Examination Board are given credit for the courses which they have had on this program and are placed in advanced courses in the respective subjects.

The University also has its own Advanced Placement Program. Advanced Placement Examinations are given at the beginning of the freshman year. Qualified freshmen may exempt elementary courses in mathematics, English, home economics, foreign languages, political science, and zoology. In some of these subjects, college credit will be given for the courses exempted.

Students are encouraged to exempt elementary courses and go on to more advanced work.

HONORS PROGRAMS

Honors Programs of study for students of superior academic qualifications are provided in the College of Arts and Sciences and the College of Business Administration. These two programs are coordinated by the Honors Program Office (210 Old College), and detailed information is available from this office.

Both Honors Programs are open to students from other colleges and schools who meet the requirements and are recommended by their college or school.

Further information on these two programs is given under the College of Arts and Sciences section and the College of Business Administration section.

INDEPENDENT STUDY

A junior or senior student of superior scholastic standing who wishes to pursue independent study in a particular subject may do so upon the recommendation of his major professor and the approval of the Executive Committee of the College of Arts and Sciences.

RECOGNITION OF EXCELLENCE

The University encourages excellence in scholarship by giving official recognition to students whose work is superior. The Dean's list is announced at the end of each quarter. It consists of those students who have made an average of 90 or higher during the preceding quarter.

HONOR FRATERNITIES AND SOCIETIES

Several honor fraternities and societies at the University extend recognition to students on the basis of scholarship and good character. There are chapters of Phi Beta Kappa, Sigma Xi, Phi Kappa Phi, and of many college, school, and departmental honor societies.

HONORS DAY

Honors Day was introduced by the late Chancellor S. V. Sanford in 1930 to give public recognition to students who achieve high scholastic records. All students in

the University who stand in first five per cent and second five per cent of their classes are included in the honors program. Listed separately are those students who have been elected to honorary scholarship societies not confined to any one college or department and those students who have earned special awards for their scholastic achievements. Honors Day is held in May of each year.

GRADUATION WITH HONORS

The University awards degrees with honors to candidates who achieve specified scholastic records. Not more than 45 quarter hours taken at other institutions may be applied to the degree with honors requirements. The specified scholastic records and honors are: cum laude for an average of 90.0 to 92.9; magna cum laude for an average of 93.0 or better; summa cum laude for a record with all grades of A or A+.

VALEDICTORIAN

The student with the highest academic average at the University is named valedictorian of his class. Not more than 45 quarter hours taken at other institutions may be used to determine eligibility for valedictorian.

DEGREE REQUIREMENTS

MINIMUM REQUIREMENTS

For students entering the University after September 1, 1967, the minimum graduation requirements will be 195 quarter hours. Basic ROTC and physical education will each carry one academic hour credit per quarter (up to six quarters). For students enrolled prior to September 1, 1967, the minimum graduation requirements are 185 quarter hours excluding basic ROTC and physical education.

Some schools and colleges require additional hours for graduation. See the appropriate school or college sections for their requirements.

RESIDENCE

The minimum residence requirements for a baccalaureate degree is 90 quarter hours. At least 45 quarter hours must be in senior division courses with not less than 35 of these hours in the senior year. Exceptions to this requirement may be made under special circumstances upon recommendation of the curriculum committee of the school or college and the approval of the Faculty Executive Committee.

Students who present acceptable college credits earned before September 1960, or who are enrolled for a second baccalaureate degree, may satisfy the residence requirements by completing in residence 45 hours in courses numbered 200 and above with an average grade of C or better.

If a student elects to satisfy the requirements for the B.S. degree by substituting the first year's work in the Medical College of Georgia or the Georgia Institute of Technology for his last year's work in the University, the residence requirement is 45 quarter hours, 30 quarter hours of which must be in courses numbered 200 and above, taken after admission to senior division standing.

CORRESPONDENCE AND EXTENSION WORK

Not more than one-fourth of the work counted toward a degree may consist of courses taken by correspondence or extension. Work taken at the off-campus centers is classified as extension.

HOURS

Each candidate for a degree must secure credit in approved courses totaling at least the number of quarter hours required for a degree by the school or college in which he is registered.

For instance, the College of Arts and Sciences requires for graduation 195 quarter hours. Other schools and colleges may require more quarter hours, and these are listed in the sections dealing with those schools and colleges.

GRADES

Each candidate must have an average of not less than C in all grades received. In addition, he must not have grades below C in more than one fourth of the total of quarter hours earned.

ENGLISH

English 101 and 102 (English Composition) are required for all undergraduate degrees from the University of Georgia. A grade of C or better is required for English 101 and an average grade of C or better is required for both courses.

MILITARY REQUIREMENTS

All physically qualified freshman male students must enroll in and complete two consecutive years of basic ROTC with the exception of veterans, non-citizens, and those otherwise exempted. The basic courses are Military Science 1-2 or Aerospace Studies 100-200. Having initiated basic ROTC at the University or at another college where ROTC is required, the student is responsible for the completion of six quarters of basic ROTC. Six hours total credit (one hour per quarter).

PHYSICAL EDUCATION

All non-veteran freshman and sophomore men and all freshman and sophomore women are required to complete with passing grades, Physical Education 1 and 2. Students physically or organically handicapped will be assigned to special physical education classes. Students who enter the University with senior division standing and who have fulfilled the physical education requirements of the institution from which they transferred will not be required to take Physical Education 1 and 2. Six hours total credit (one hour per quarter).

EXAMINATIONS ON THE CONSTITUTIONS

Examinations on the Constitutions of the United States and that of the State of Georgia are required of all persons receiving a degree from the University, including those transferring Political Science 101 from institutions outside the state, unless exempted by credit in courses dealing with these constitutions.

Approved courses for exemption are as follows:

Federal Constitution

Pol 101

Pol 105H

Federal and Georgia Constitution

Pol 101 (U. Ga.)

Pol 105H (U. Ga.)

Pol 406

Pol 408

Pol 483

Pol 484

His 251 and 252

His 351 and 352

His 405

His 353H and 354H

Pol 406 (U. Ga.)

His 459 and 405

Georgia Constitution

Sos 104

His 459

Pol 405

Pol 406 (U. Ga.)

Examinations are given annually on the first Thursday after Washington's birthday and the first Thursday after the Fourth of July. A series of lectures to help students prepare for these examinations is offered during the two weeks preceding the examination in February.

Special examinations for students who failed or were absent from regular examinations are offered on the first Thursday in May, the first Thursday in November, and in exceptional cases upon other dates.

EXAMINATIONS ON UNITED STATES AND GEORGIA HISTORY

Examinations on the history of the United States and Georgia are required of all persons receiving a degree from the University, unless exempted by credit in courses dealing with this history.

History

His 100

His 251 and 252

His 251 and 352

His 251 and 354H

His 351 and 352

His 351 and 252

His 351 and 354H

His 353H and 354H

His 459 and 251

His 459 and 252

His 459 and 351

His 459 and 352

His 459 and 353H

His 459 and 354H

His 459 and 406

Examinations are ordinarily given with the freshman placement tests at the beginning of each fall quarter.

SPECIAL REQUIREMENTS

Candidates for degrees must show that they have met all general University requirements for such matters as registration and payment of fees and special requirements of the college or schools in which they have been registered.

All candidates for degrees should check their program for graduation with the Registrar and dean of their school or college three quarters prior to the date of graduation. Students who fail to perform this duty will forfeit any equity in the adjustment of errors or omissions made in their programs.

A candidate for a degree, unless excused in writing by the secretary of the faculty, must attend the graduation exercises at which he expects his degree to be conferred.

The University reserves the right to withhold the diploma of a student who has completed all academic requirements if he is guilty of conduct which is morally reprehensible or is of such disorderly nature that could have been disciplined by expulsion.

DIVISION OF THE ARMED SERVICES

Warren A. Thrasher, B.S., M.B.A., Colonel, USA, P.M.S.

Robert P. Crow, B.S., M.A., Colonel, USAF, P.A.S.

The mission of the Reserve Officers' Training Corps is the production of junior officers who have qualities and attributes essential to their progressive and continued development in the Army or the Air Force of the United States. The ROTC courses are focused on the development of individual leadership and a sense of responsibility for duty as an officer of the National Military Establishment. Special attention is given to the maintenance of high standards of conduct and academic achievement.

BASIC ROTC

All physically qualified freshman male students must enroll in and complete two consecutive years of basic ROTC as a requirement for graduation with the exception of veterans, non-citizens, and those otherwise exempted. Six quarter hours academic credit applicable toward graduation is granted for successful completion of basic ROTC courses.

Students transferring from other institutions that have a compulsory ROTC program will be required to continue ROTC training to completion of the basic course. Such students will normally be required to continue in the branch of service of prior enrollment. Students entering at sophomore or higher level without prior basic ROTC, or equivalent, are not required to enroll in the ROTC program at this University. Students who have completed ROTC courses in essentially military preparatory schools or junior colleges will be given appropriate credit toward their college ROTC requirement. No credit is given for high school ROTC participation.

ADVANCED ROTC

The Reserve Officers' Training Corps Vitalization Act of 1964 authorizes a two year advanced ROTC program which offers a student entering this University who does not have credit for basic ROTC, an opportunity to earn a commission as Second Lieutenant. A transfer student who has two years of college remaining, either graduate or undergraduate, is eligible to be considered for selection to the two year advanced ROTC program. Selection is based on physical suitability together with academic achievement and the results of mental officer qualification test. Students selected must attend a six week basic summer camp prior to admission to the advanced ROTC program. Students contracting to pursue the advanced ROTC Courses are paid a monthly subsistence allowance of \$50 for 20 months. (tax free).

For statements about fees, uniforms and textbooks, see Financial Information.

BASIC SUMMER CAMP FOR ADVANCED ROTC

Students transferring to the University who have not completed Basic ROTC but with two years of college remaining, are eligible to be considered for selection to the advanced ROTC program. Those selected must attend a basic summer camp of six weeks duration prior to entering the advanced program. Students attending this camp are messed, quartered, paid at the rate of about \$90 per month and given a travel allowance of six cents per mile from their home to camp and return.

ADVANCED SUMMER CAMP

Students contracting to pursue the advanced courses are required to attend advanced summer camp, normally between the two academic years of the advanced course. Students attending this camp are messed and quartered, paid at the rate of about \$152 per month, and given a travel allowance of six cents per mile from their home to camp and return. Air Force cadets in the two-year program do not attend this camp.

DEPARTMENT OF MILITARY SCIENCE

The course of study normally pursued by a student during his freshman and sophomore years is known as the Basic ROTC Course, and the course of study normally pursued by a student during his junior and senior years is known as the Advanced ROTC Course. For selection and retention in the Advanced Course, a student must be physically qualified, must have maintained above average military and academic standing, must enlist in a reserve component under the jurisdiction of the Secretary of the Army, and must have demonstrated a potential for further leadership development. The consent of the parent or guardian is required for students under 21 years of age.

Graduates of the Advanced Course are commissioned as Second Lieutenants in the United States Army Reserve in the arm of service most appropriate to their interests and academic achievements consistent with the needs of the Army. They are exempt from selective service requirements and instead will be called to active duty within twelve months after graduation and will serve in their commissioned status for a period of six months to two years depending upon the prevailing requirements and circumstances. Graduates may be granted delay in reporting for active duty for graduate study in many fields. A number of outstanding graduates are offered commissions in the Regular Army each year.

DEPARTMENT OF AEROSPACE STUDIES

The first two years (basic ROTC) are known as the General Military Course (GMC) and the second two years are known as the Professional Officer Course (POC). Selection for the POC is based on interest in the Air Force together with achievement records of academic ability, observed leadership traits, and the results of a mental officer qualification test and physical examination.

Graduates of the Professional Officer Course are commissioned as Second Lieu-

tenants in the USAF Reserve. Distinguished graduates may be tendered commissions in the regular Air Force.

Normally, commissioned graduates are scheduled to be called to active duty from one to six months after graduation. Flight training requires approximately one year and is followed by five years of active duty. Those commissioned in non-flying categories (e.g.: finance, meteorology, administration, legal) have a four-year service commitment. Those who wish to take graduate training and others for which there is a critical need, may request a delay in call to active duty, normally granted based on needs of the Air Force.

NOTES



College of Agriculture

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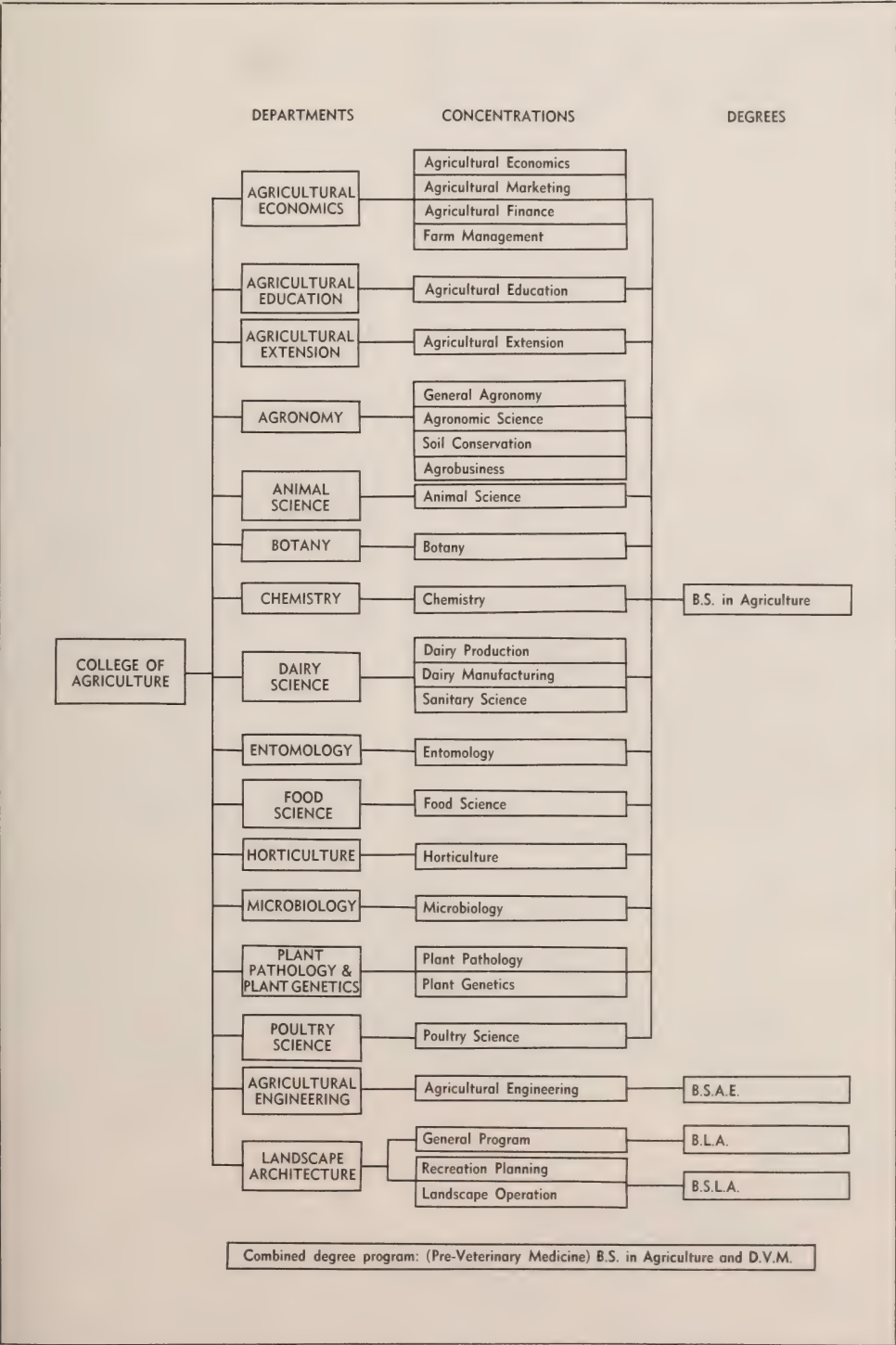
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College of Agriculture

ADMINISTRATIVE OFFICERS

CALVIN CLYDE MURRAY, B.S., M.S., Ph.D., Dean and Coordinator of Agriculture

LINTON WEBSTER EBERHARDT, Jr., B.S.F., Director of the Agricultural Extension Service

JOHN HINSEY OWEN, B.S.A., M.S., Ph.D., Director of the Agricultural Experiment Stations

ROBERT STEVENSON WHEELER, B.S., Ph.D., Director of Resident Instruction

General Information

PURPOSE AND ORGANIZATION

The College of Agriculture has been approved by the United States Commissioner of Education for giving college instruction in agriculture and related fields. As a member of the American Association of Land-Grant Colleges and Universities, the University receives grants from the Federal Government to aid in financing its educational program in agriculture and agricultural engineering. The College of Agriculture is also recognized and approved by the United States Department of Agriculture and other agencies of the Federal Government.

The College of Agriculture provides a coordinated and integrated program of research, instruction, and extension services. The Dean and Coordinator is responsible for the administration of the agricultural experiment stations and the Agricultural Extension Service. Also supporting the organization of the College of Agriculture are three directors: A Director of Instruction; A Director of Extension Work; and A Director of Experiment Stations. In addition, there are directors at each of the experiment stations in Athens, Experiment, and Tifton.

There are eleven divisions within the College of Agriculture embracing research, teaching, and extension services. These divisions are: Agronomy, Agricultural Economics, Agricultural Engineering, Animal Science, Dairy Science, Entomology, Food Science, Horticulture, Landscape Architecture, Plant Pathology and Plant Genetics, and Poultry Science. In addition, the College of Agriculture is associated with other schools and colleges of the University in certain related fields. Among these fields are Botany, Biochemistry, Chemistry, Education, Entomology, Forestry, Home Economics, Microbiology, and Veterinary Medicine.

FACILITIES

The modern facilities of the College of Agriculture include the Livestock Poultry Building, the Food Science Building, the Dairy Science Building, the Biological Science Building and the Agriculture Engineering Center — all located on South Campus — and the Landscape Architecture Building located on North Campus.

The Agronomy Department has research and teaching facilities including laboratories, greenhouses and two farms. Laboratory equipment is available for making

complete soil and plant tissue analysis and for sectioning, staining and mounting plant parts for microscopic study.

The Dairy Science Building, in addition to adequate teaching facilities, has a dairy manufacturing laboratory which is used for training students in the operation of dairy processing and manufacturing equipment.

Teaching and research laboratories for dairy production are in the Livestock-Poultry Building. A dairy farm is adjacent to the campus and provides a practical program of feed production and herd management. The herd of purebred animals of two major dairy breeds is used for instruction of students.

The modern million dollar Food Science Building offers facilities for processing all types of meat, poultry, and horticultural products; for food packaging studies; and for radioisotopic, chemical, and microbiological studies involving foods.

The Department of Horticulture has greenhouses and gardens on campus for teaching and research. In the headhouses of the greenhouses are cold storage rooms, special laboratories, and equipment for research and teaching with growing plants. In addition, the Department maintains orchards, research plots, and greenhouses on a farm six miles from the campus.

In addition to teaching and research laboratories in the Food Science Building and in Barrow Hall, the Department of Plant Pathology and Plant Genetics has greenhouse facilities for plant disease studies with inoculation chamber and controlled environment chambers in the adjoining headhouse. The Oconee River Bottom Plant Genetics Laboratory with adjacent plot land provides facilities for field experiments in genetics and plant breeding.

The Poultry Research Unit located on campus includes modern laying houses and brooder space. There is also a modern and complete laboratory for heat tolerance studies, a nutrition laboratory, and more than 100 breeding pens for teaching and research in poultry breeding and genetics. In addition, a broiler research center is three miles from Athens on the University's Whitehall Poultry Farm.

Among the facilities available to Landscape Architecture students is the Founders Memorial Garden which affords an excellent field laboratory, and the Landscape Architecture Building with drafting rooms, model making shop, photographic room, departmental library and gallery.

AGRICULTURAL EXPERIMENT STATIONS

Agricultural experiment stations are situated in various parts of the State including three main stations, four branch stations, three field stations and four cooperating stations. All are placed in the major agricultural areas of Georgia.

These stations conduct a comprehensive program of basic and applied research in all phases of agriculture encompassing production, processing, marketing, consumer relations and agri-business. Research in forestry, home economics and veterinary medicine is also part of the experiment station program. As a result the latest research information is supplied to the resident teaching and extension functions of the College of Agriculture. The primary purpose of the work of the stations, however, is to provide an ever increasing body of knowledge to undergird Georgia's dynamic agricultural economy.

The College Experiment Station at Athens is directly associated with the resident

teaching program of the College of Agriculture. Many of the research scientists at this station also teach at both the undergraduate and graduate levels. The experiment station laboratories and field plots supplement the regular teaching facilities. In connection with the research program, some part-time employment plus a number of graduate work assistantships are provided for students majoring in the College of Agriculture.

DEGREES OFFERED

The College of Agriculture offers degree courses in the agricultural and biological sciences, agricultural engineering, and landscape architecture. Students registered in agriculture may receive the Bachelor of Science degree in Agriculture, and students in agricultural engineering, the Bachelor of Science degree in Agricultural Engineering.

The Department of Landscape Architecture, a department in the College of Agriculture, offers two degree courses: one, the professional degree B.L.A. — Bachelor of Landscape Architecture; the other, B.S.L.A. — Bachelor of Science in Landscape Architecture.

B.S.A. DEGREE IN CONJUNCTION WITH D.V.M. DEGREE

Students who are admitted to the School of Veterinary Medicine and who have completed at least 45 hours of courses numbered 200 or above on the Athens campus of the University, may receive the B.S.A. degree after successful completion of the first year toward the D.V.M. degree. To qualify for the B.S.A. degree, these students must complete 20 hours of senior division course work in animal science, dairy science or poultry science in addition to the minimum pre-veterinary medicine program outlined above.

GRADUATE STUDY

The Master of Science degree is offered in all departments of the College of Agriculture, Agricultural Engineering, and Landscape Architecture. The Ph.D. degree is offered in Agricultural Economics, Agronomy, Animal Nutrition, Food Science, Dairy Manufactures, Plant Pathology, Plant Sciences and Poultry Science. For further information concerning these degrees, consult the Graduate Bulletin.

PRE-PROFESSIONAL PROGRAM FOR VETERINARY MEDICINE

It is recommended that students seeking admission to the School of Veterinary Medicine register in the College of Agriculture while enrolled in the pre-veterinary program.

Any student who is registered in the College of Agriculture may, upon completion of pre-veterinary requirements, continue with the agricultural curriculum, should he fail to gain admittance to the School of Veterinary Medicine. Such students will be able to apply all credits earned to requirements for the B.S.A. degree.

ADMISSION REQUIREMENTS FOR VETERINARY MEDICINE

Faculty Adviser: Dr. Robert S. Wheeler, Rm. 101, Conner Hall

In order to matriculate in the School of Veterinary Medicine, a student must present a minimum of 99 quarter hours credit, exclusive of Basic Military and Physical Education, with a grade of C or better.

To meet these requirements, a student should register in the College of Agriculture and take the following courses:

	<i>Hours</i>
Chemistry 121, 122, 223, 340, 341	25
Biochemistry 301	5
Physics 127, 128	10
Mathematics 100, 101	10
Botany 121, Zoology 225, 226	15
English 101, 102, Speech 108	15
Animal Science 101, Dairy Science 103, Poultry Science 160	9
Nutrition (AS 358), Genetics (GEN 358)	10
Political Science 101, History 100	(10) *
Basic ROTC	6
Physical Education	6

All candidates for admission into the entering class in September each year will be required to take during the preceding February a veterinary medical aptitude test. The results of this test will become a part of the student's credentials for admittance into the School of Veterinary Medicine.

Special Services

THE COOPERATIVE EXTENSION SERVICE

The major function of the Cooperative Extension Service is to aid in diffusing among the people of the State useful and practical information on subjects relating to agriculture, forestry, veterinary medicine and home economics and to encourage the application of this information. It provides informal education which helps people solve the problems encountered in home economics, youth development, agriculture, agricultural business, resource development and other related subjects. The extension service program is carried out in cooperation with the counties of the State by specialists from the University, county agents and county extension home economists.

Through the Cooperative Extension Service, the on-campus elements of the University have a direct line of communication to each county in the State. The administrative, supervisory and specialists staff of some 125 people headquartered on campus regularly visit the county offices throughout the State and bring back reports on problems in areas of agriculture, agri-business, home economics and local community life that require further study.

*May be satisfied by passing the examinations on the Federal and Georgia Constitutions and on American and Georgia history. Students following a three-year pre-veterinary schedule must include 9-15 hours of social science courses in their curriculum if they satisfy the constitution and history requirements by examination.

The Cooperative Extension Service also conducts the 4-H Club Program. 4-H Clubs are made up of local groups of young people whose objectives are to learn how to live better and to become better citizens.

EXTENSION COURSES

Many short courses of a practical and intensive nature are offered by the College of Agriculture. Announcements of these courses will be made throughout the year. Any course will be offered for which there is sufficient demand. A citizen of Georgia desiring to take any such course should write to the Dean of the College of Agriculture, indicating the field or problem in which instruction is desired.

SPECIAL STUDENTS

Frequently, requests are received relative to short periods of training on a non-degree basis. The laboratories of the College are available at all times for informal training under the supervision of the person in charge of the laboratory.

Degree Requirements

All students should acquaint themselves with the minimum degree requirements applicable to all schools and colleges of the University as set down in the General Information section of this catalogue.

GENERAL CORE CURRICULUM FOR THE BACHELOR OF SCIENCE IN AGRICULTURE

The core curriculum to be taken during the freshman and sophomore years provides a general education of basic science courses as well as introductory courses in agricultural science. This allows a flexible choice of agricultural and non-agricultural electives.

By the time he has completed the core curriculum, the student should have selected his major field of study from one of 18 departments. A student majoring in the College of Agriculture has a choice of two options:

1) The Science Option. This program is designed to provide training in basic and applied sciences and to prepare students for graduate study, teaching, extension, research, farming or for employment in State and Federal agencies and in private industry.

2) The Administration Option. This option provides training in technical agriculture and in business management. It is designed to prepare students for employment in agri-business firms which process, package, transport, finance, store and merchandise farm products; sell feed, fertilizer, drugs, vaccines, insecticides, machinery and other supplies to farmers. The core curriculum for:

I. Bachelor of Science degree in Agriculture

II. Bachelor of Science degree in Agricultural Engineering

III. Bachelor of Landscape Architecture or Bachelor
of Science in Landscape Architecture degrees

and their respective concentrations will be treated separately, beginning with the Bachelor of Science degree in Agriculture.

I. BACHELOR OF SCIENCE IN AGRICULTURE

Core Curriculum

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>
Chemistry 121, 122, 261	15
Biology 101, 102 and one other course in the Biological Sciences	15
English 101, 102, Speech 108	15
Physical Science 101	5
Mathematics 100	5
*Political Science 101, History 100	10
College of Agriculture Courses	15
Electives or Special Requirements	10
Basic ROTC, Physical Education 1-2	12

JUNIOR AND SENIOR REQUIREMENTS

A. Administration Option

	<i>Hours</i>
MAJOR	20
In Agricultural Economics, Agricultural Extension, Agronomy, Animal Science, Dairy Science, Entomology, Genetics, Food Science, Horticulture, Plant Pathology, Plant Breeding or Poultry Science.	
AGRICULTURAL ECONOMICS: 304, 408, 467	15
BUSINESS ADMINISTRATION: Accounting 110, Management 370 and 10 additional hours approved by faculty advisor	20
SCIENCE SELECTIONS	10
Microbiology 350, 461, Botany 375, 380, Agronomy 423, Chemistry 223, 380, 451, Economics 105, 312, Geology 125, Mathematics 101, 200, 253, 300, Sociology 431, 433, Plant Pathology 353, Genetics 358, Entomology 374, Zoology 390.	
SPECIAL REQUIREMENTS: Mathematics 200 or Economics 312, Agricultural Economics 469 or Finance 330	10
ELECTIVES AND/OR ADDITIONAL SPECIAL REQUIREMENTS	30
TOTAL JUNIOR-SENIOR REQUIREMENTS	105
TOTAL FRESHMAN-SOPHOMORE REQUIREMENTS	90**
TOTAL COURSE REQUIREMENTS	195**

JUNIOR AND SENIOR REQUIREMENTS

B. Science Option

	<i>Hours</i>
MAJOR	20
In Chemistry, Agricultural Economics, Agricultural Education, Agricultural Extension, Agronomy, Animal Science, Botany, Dairy Science, Entomology, Food Science, Genetics, Horticulture, Plant Pathology, Poultry Science, or Microbiology.	

*May be satisfied by passing qualifying examinations. If satisfied by examination, equivalent credits must be earned in the social sciences or humanities.

**Exclusive of basic ROTC and Physical Education 1-2.

SCIENCE SELECTIONS 25
Microbiology 350, 461, Botany 375, 380, Agronomy 423, Chemistry 223,
380, 451, Economics 105, 312, Geology 125, Mathematics 101, 200, 253,
Sociology 431, 433, Plant Pathology 353, Genetics 358, Entomology 374,
Zoology 390.

FIRST MINOR 10
May be in any one department of the University.

SECOND MINOR 10
Must be in the College of Agriculture.

SPECIAL REQUIREMENTS — not more than 20

GENERAL ELECTIVES — Not less than 20

TOTAL JUNIOR-SENIOR REQUIREMENTS 105

TOTAL FRESHMAN-SOPHOMORE REQUIREMENTS 90**

TOTAL COURSE REQUIREMENTS 195**

Programs of Study

Following is an explanation of majors offered by the departments of the College of Agriculture and related departments in which students may major. The requirements outlined within each program are suggestive rather than definite. The major for each student is an individual program, arranged in consultation with staff members in the department in which the major is taken. Mainly, however, the following programs include the courses which the majority of students will elect to take.

Each student should consult with the head of the department in which he intends to do his major work for a list of the freshman-sophomore courses required or suggested for a major in that department.

A complete list of freshman-sophomore courses required by majors in agricultural education is given under the listings of that department.

DEPARTMENT OF AGRICULTURAL
ECONOMICS (AEC)
(Livestock — Poultry Building)

Division Chairman and Head: Brannen. Staff: Brown, Chai, Culver, Frazier, Jones, Jones, LaPlante, McArthur, Martin, North, Saunders, Thompson, Wise.

The Department of Agricultural Economics offers courses designed to train young men and women for jobs in agriculture and allied vocations. The principal objectives of this type of training are:

(1) To prepare students for entering private business in positions that require fundamental training in farm management, marketing, land use, farm credit and other similar areas connected with agriculture. The growing importance of distribution is placing added emphasis upon training in agricultural marketing. Adjustments in systems of farming are emphasizing the need for training in the field of farm credit. The great emphasis upon agri-business calls for more training in economics.

**Exclusive of basic ROTC and Physical Education 1-2.

(2) To prepare students for graduate work in agricultural economics. An expanding program of research in agricultural economics in the land-grant colleges and in the United States Department of Agriculture has opened more positions for agricultural economists with advanced training. Demand by private businesses for men with graduate training has also increased greatly.

(3) To prepare students for positions with the Federal and State departments of agriculture, and in the teaching, research, and agricultural extension divisions of land-grant colleges. These positions require specialized preparation in agricultural economics, agricultural credit, farm finance, land economics, agricultural adjustments, marketing farm products, farm management and cooperation in agriculture.

CONCENTRATION IN AGRICULTURAL ECONOMICS

Science Option

JUNIOR AND SENIOR YEARS

This concentration is suggested for those who desire a comprehensive knowledge and understanding of economics applied to agriculture and those who later on may formulate a more specialized program of study.

	<i>Hours</i>
MAJOR: Agricultural Economics 301, 304, 310, 351	20
SCIENCE SELECTIONS: Selected with departmental approval	25
FIRST MINOR: Including Management 370	10
SECOND MINOR: Must be in one department of the College of Agriculture	10
SPECIAL REQUIREMENTS: Accounting 110, Agricultural Economics 458 or 467 and Statistics	15
ELECTIVES: Selected with departmental approval	25

CONCENTRATION IN AGRICULTURAL ECONOMICS

Administration Option

JUNIOR AND SENIOR YEARS

This concentration is designed to train men for jobs in agricultural businesses, including firms marketing agricultural commodities and those providing supplies, equipment and services to producers.

	<i>Hours</i>
MAJOR: Agricultural Economics 301, 304, 408, 467	20
AGRICULTURAL ELECTIVES: (Other than agricultural economics)	15
BUSINESS ADMINISTRATION: Accounting 110, Management 370 and 10 additional hours approved by faculty advisor	20
SCIENCE SELECTIONS: Selected with departmental approval	10
SPECIAL REQUIREMENTS: (Statistics 200 or Economics 312; Agricultural Economics 310, 469 or Economics 330)	15
ELECTIVES: Selected with departmental approval	25

CONCENTRATION IN AGRICULTURAL MARKETING

Science Option

JUNIOR AND SENIOR YEARS

This concentration is designed to train men for jobs in agricultural marketing, including professional positions in teaching, extension and research in this field.

	Hours
MAJOR: Agricultural Economics 304, 310, 400, 403	20
SCIENCE SELECTIONS: Selected with departmental approval	25
FIRST MINOR: May be in any department in the University (Recommended: Accounting 110 and Management 370)	10
SECOND MINOR: Must be in one department of the College of Agriculture	10
SPECIAL REQUIREMENTS: Statistics 200 or Economics 312 and Agricultural Economics 408, 467 and 469	20
ELECTIVES: Selected with departmental approval	20

CONCENTRATION IN AGRICULTURAL FINANCE

Science Option

JUNIOR AND SENIOR YEARS

This concentration is suggested for those who desire a program of study more specialized in the financial management of farms and businesses. It is designed for those who anticipate service with agricultural finance institutions such as banks, Federal agencies, loan associations, cooperatives and other corporations.

	Hours
MAJOR: Agricultural Economics 301, 310, 351, 469	20
SCIENCE SELECTIONS: Selected with departmental approval	25
FIRST MINOR: May be in any one department of the University (Recommended: Finance 326 and 434)	10
SECOND MINOR: Must be in one department of the College of Agriculture	10
SPECIAL REQUIREMENTS: Accounting 110, Management 370, Agricultural Economics 458, and 421 or 467	20
ELECTIVES: Selected with departmental approval	20

CONCENTRATION IN FARM MANAGEMENT

Science Option

JUNIOR AND SENIOR YEARS

This concentration is recommended for students who expect to become county agents, teachers of agriculture, farm operators, farm managers, land appraisers or do other work involving plans for organization and management of farms.

	Hours
MAJOR: Agricultural Economics 301, 304, 310, 421	20
SCIENCE SELECTIONS: Selected with departmental approval	25

FIRST MINOR: May be in any one department of the University	10
SECOND MINOR: Agronomy 321 or 333 and 356 or 458	10
SPECIAL REQUIREMENTS: Agricultural Economics 402, 408, and 458	15
ELECTIVES: Selected with departmental approval	25

DEPARTMENT OF AGRICULTURAL EDUCATION (EAG)

(Baldwin Hall)

Head: Tolbert. Staff: Duncan, O'Kelley.

CAREER OPPORTUNITIES

The courses offered in this department prepare men to be teachers of vocational agriculture. Major students in this department have a broad training in agriculture, and, upon the satisfactory completion of the training program outlined, are qualified for certification by the State Department of Education as teachers of vocational agriculture. The program for training teachers of vocational agriculture is carried on in cooperation with the College of Education through its Division of Vocational Education.

In addition to the opportunities for teaching vocational agriculture, graduates who have majored in this department are employed in many leadership positions in the fields of agriculture and education. Such positions capitalize on the technical and professional skills of these graduates for application in various selling, promotional, administrative, research and educational leadership projects.

APPRENTICE TEACHING

During one quarter of the senior year, each student does apprentice teaching in a selected off-campus school for which fifteen quarter hours of credit are given. This system of training enables the apprentice to deal first-hand with the many problems of a teacher of vocational agriculture in a normal situation under the careful supervision of the local teacher of vocational agriculture as well as a member of the University Staff.

CONCENTRATION IN AGRICULTURAL EDUCATION

Freshman-Sophomore Courses

The following 23 hours of junior division agriculture courses are required for the agricultural education concentration: Agricultural Economics 104, 110, Agricultural Engineering 220, Poultry Science 160, Animal Science 101 or Dairy Science 103, Agronomy 101 and 210.

JUNIOR AND SENIOR YEARS

Science Option

MAJOR: Education 335, 336, 346, 347, 348	Hours 25
SCIENCE SELECTIONS: Education 304 or 455 and four of the following courses:	
Microbiology 350, Plant Pathology 353, Genetics 358,	
Entomology 374, Sociology 431 or 433	25

FIRST MINOR: Selected from any department in the University
subject to approval of advisor 10

SECOND MINOR: Agricultural Economics 301, 304 10

SPECIAL REQUIREMENTS: Animal Science 373, Education 349,
Agricultural Engineering 203, 207, Forestry 394 23

ELECTIVES 12

DEPARTMENT OF AGRICULTURAL
EXTENSION (AET)

(Agricultural Extension Building, South Campus)

Head: Lancaster. Staff: Harris and Agricultural Extension Staff.

CAREER OPPORTUNITIES

The concentration offered by this department is designed for men and women who wish to prepare for Agricultural Extension Service careers. It is open to men pursuing the B.S.A. curriculum in the College of Agriculture and to women in the School of Home Economics.

Students who choose this concentration, both men and women, must complete all freshman and sophomore courses in their respective degree-course programs. Upon completion of these requirements, they are to prepare, in keeping with the requirements of their respective concentrations, a program for their junior and senior years, which must be approved by their major professor.

REQUIREMENTS FOR CONCENTRATION

The concentration which follows this introductory statement sets forth the requirements for students in the College of Agriculture who wish to meet the qualifications for becoming a county agent. Only those students who are farm-reared and have had adequate, practical farm experience will be permitted to pursue this training program.

FIELD EXPERIENCE

Two or more of the courses included in the major, one of which shall be Agricultural Extension 313, must normally be taken during the junior year. This will make it possible to provide for one summer's field experience, under supervision, to be completed prior to registering for Agricultural Extension 314, which is a course that may be taken only during the senior year. Field experience for a period of two or more months, under an approved county agent or some other Extension Service worker is desirable in this concentration. No college credit will be given for field experience. However, those taking this concentration, and who are selected for field training, will be paid a nominal salary during the period of training.

CONCENTRATION IN AGRICULTURAL EXTENSION

Science Option

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
MAJOR: Agricultural Extension 313, 314, Sociology 431, Education 304	20
SCIENCE SELECTIONS: Microbiology 350, Botany 380, Economics 312, Plant Pathology 353, Entomology 374	25

FIRST MINOR: Agronomy 321 or 333, Agronomy 356	10
SECOND MINOR: May be in one department in the University	10
SPECIAL REQUIREMENTS: Journalism 368, Agricultural Extension 401 . .	10
ELECTIVES: To be selected with the objective of providing a well-rounded program for the individual. Must be approved by the major professor. May be chosen from the offerings of any department of the University	30

CONCENTRATION IN AGRICULTURAL EXTENSION

Administration Option

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
MAJOR: Agricultural Extension 313, 314, Education 304, Sociology 431 . .	20
AGRICULTURAL ECONOMICS: 304, 408, 467	15
BUSINESS ADMINISTRATION: Accounting 110, Management 370 and additional 10 hours approved by faculty advisor	20
SCIENCE SELECTIONS: Microbiology 350, Entomology 374	10
SPECIAL REQUIREMENTS: Mathematics 200 or Economics 312, Agricultural Economics 469 or Finance 330	10
ELECTIVES: To be selected with approval of faculty adviser	30

AGRICULTURAL JOURNALISM

There is a demand for College of Agriculture graduates trained in the various media of communications. Because of this, arrangements have been made with the School of Journalism for students in any department in the College of Agriculture to obtain the equivalent of a major in agricultural journalism. This is possible because of the flexibility permitted in the selection of minor courses and general electives.

The student takes the required courses of the core curriculum for the Bachelor of Science in Agriculture degree and selects his major in a department of the College of Agriculture. In addition, he uses his extra time allotted to minor courses and electives for journalism courses.

Generally, the agriculture-journalism courses are selected from the following courses:

Introductory Courses 1, 350, or 368	Public Relations 577
Magazines 456	Radio and Television 580
Advertising 557	Radio and Television News 581
Feature Writing 558	Radio and Television Programming 582
Book Reviewing 559	

DEPARTMENT OF AGRONOMY (AGY)

(Conner Hall)

Head: Rogers. Staff: Adams, Bailey, Beaty, Bertrand, Box, Brown, Bruce, Giddens, Jackson, Morris, McCreery, Pallas, Parkman, Parks, Perkins, Ritchie, Weaver, Wilkinson.

The courses offered in the Agronomy Department are designed for students interested in general farm crop production, soil management practices, the various

fields of specialization in agronomic work, and electives for majors in other fields of specialization.

CAREER OPPORTUNITIES

Students majoring in this department are prepared for general farming, for farm managers and for employment in various fields of agriculture such as the U. S. Department of Agriculture, experiment station workers, college teachers, extension work in crops and soils, seed industry, soil conservation, soil survey, and the fertilizer industry. Provision is made for those who continue their training as graduate students in either crops or soils.

CURRICULUM

Qualified students are encouraged to take a course of study that will prepare them for further training leading to advanced degrees in either crops or soils. Concentration in agronomic science is designed for students who wish to continue studies at the graduate level with specialization in crop production, crop physiology, crop breeding, crop ecology, crop climatology, crop utilization, soil classification, soil genesis, soil mineralogy, soil microbiology, soil physics, soil conservation, soil fertility or soil chemistry.

Four concentrations are offered with electives in related fields.

I. CONCENTRATION IN GENERAL AGRONOMY
JUNIOR AND SENIOR YEARS

This concentration is designed for students who plan to farm or to enter the fields of farm management, farm operation, technical planning, or agronomic work in soil-conserving programs. It is not designed for those who plan to do graduate work.

	<i>Hours</i>
MAJOR: Agronomy 333, 321, 356, 458	20
SCIENCE SELECTIONS: Microbiology 350, Botany 375, 380, Plant Pathology 353, Genetics 358	25
FIRST MINOR: Any department in the University (Must be approved by the student's adviser)	10
SECOND MINOR: Agronomy 324, 433	10
SPECIAL REQUIREMENTS FROM: Agricultural Economics 301, 364, Botany 305, Ent. 374, Plant Pathology 356, Geology 125, Sociology 431	20
GENERAL ELECTIVES	20

II. CONCENTRATION IN AGROBUSINESS
JUNIOR AND SENIOR YEARS

This course of study is planned to give a student training in agronomy and in the field of business. A student graduating with a major in this concentration is prepared to enter various types of agricultural business. These include fertilizer and seed sales as well as other forms of private business serving the farmer or processing farm products.

	<i>Hours</i>
MAJOR: Agronomy 324, 356, and 10 hours from Agronomy 333, 321, 433, 458	20
SCIENCE SELECTIONS: 10 hours from Plant Pathology 353, Genetics 358, Entomology 374	10
FIRST MINOR: Accounting 110, Management 370, plus 10 additional hours in business administration	20
SECOND MINOR: Agricultural Economics	15
SPECIAL REQUIREMENTS: Mathematics 200 or Economics 312 and Agriculture Economics 467 or 469	10
ELECTIVES	30

III. CONCENTRATION IN AGRONOMIC SCIENCE
JUNIOR AND SENIOR YEARS

This concentration is designed primarily for students who plan to enter graduate school to continue their training in either plant science or soil science.

	<i>Hours</i>
MAJOR: Twenty selected hours in Agronomy	20
SCIENCE SELECTIONS: Twenty-five hours to be selected from: Plant Pathology 353, Mathematics 101, 253, 255, Botany 305, 323, 375, 380, 476, Geology 125, 321, 323, Chemistry 223, 380, Physics 127, 128, 229	25
FIRST MINOR: Genetics 358, Entomology 374	10
SECOND MINOR: Microbiology 350, Botany 380	10
SPECIAL REQUIREMENTS AND ELECTIVES	40

IV. CONCENTRATION IN SOIL CONSERVATION
JUNIOR AND SENIOR YEARS

This concentration is designed especially for students interested in soil conservation, soil survey and farm program planning, and is not designed for those who plan to do graduate work. This concentration is given in cooperation with the Department of Agricultural Engineering.

	<i>Hours</i>
MAJOR: Agronomy 356, 454, 458, 460, 461	20
SCIENCE SELECTIONS: Botany 375, 380, Mathematics 101, Geology 125, Entomology 374	25
FIRST MINOR: Agronomy 333, 321	10
SECOND MINOR: Agricultural Engineering 210, and 5 additional hours in agricultural engineering	10
SPECIAL REQUIREMENTS: Agricultural Economics 364, Agronomy 433, Genetics 358 and Microbiology 350	20
GENERAL ELECTIVES	20

DEPARTMENT OF ANIMAL SCIENCE (AS)

(Livestock — Poultry Building, South Campus)

Head: Long. Staff: Cullison, Grooms, Lassiter, Scarth, Seerley, Warren.

The courses offered by the Department of Animal Science are designed to give students basic training in the production of beef cattle, sheep, and swine. While most of the courses offered deal with the more practical phases of selection, breeding, feeding, and management, several courses of a technical nature are offered for those students who desire to enter some specialized type of work or who plan to follow a program of graduate study.

CAREER OPPORTUNITIES

The courses of the department are especially planned for students who expect to become livestock farmers, farm managers, herdsmen, animal science specialists, county agents, vocational agricultural teachers, college teachers or experiment station workers. They are also suitable for students who intend to pursue careers with breed associations, feed manufacturers, meat packing companies, livestock commission firms, livestock equipment and supply companies, or livestock journals.

PROGRAM OF STUDY FOR ANIMAL SCIENCE MAJORS

Science Option

FRESHMAN

FALL

English 101
Chemistry 121
Mathematics 100
ROTC
Physical Education 1

WINTER

English 102
Chemistry 122
Mathematics 101
ROTC
Physical Education 1

SPRING

Speech 108
Chemistry 223
Animal Science 101
Agricultural
Engineering 265
ROTC
Physical Education 1

SOPHOMORE

Biology 101
Chemistry 340
Agricultural
Engineering 280
Agronomy 101
ROTC
Physical Education 2

Biology 102
Physics 127
Dairy Science 103
Agricultural
Economics 110
ROTC
Physical Education 2

Political Science 101
Agronomy 210
Elective
ROTC
Physical Education 2

FALL

Food Science 368
Veterinary Medicine 309
Animal Science 358
Elective

JUNIOR
WINTER

Animal Science 350
Veterinary Medicine 310
Microbiology 350
Elective

SPRING

Genetics 358
Animal Science 366
Veterinary Medicine 311
Elective

SENIOR

Animal Science 372
Animal Science 373
Elective

Animal Science 361
Agronomy 356
Elective

Animal Science 360
Agronomy 321
Elective

ADMINISTRATION OPTION—

OMIT: Veterinary Medicine 309, 310, 311; Animal Science 366
ADD: Agricultural Economics 304, 408, 467; Accounting 110; Management 370; Economics 312; Finance 330

BOTANY (BOT)
(Biological Science Building)

Dr. D. S. Van Fleet, Faculty Advisor

A major in botany is often highly desirable for students in the College of Agriculture who are interested in any of the plant sciences. A thorough knowledge of plant structures, processes, environmental requirements, and the principles of identification and classification to be derived from such a course of study is basic to agronomy, horticulture, plant pathology and plant genetics, and is generally essential as a foundation for effective graduate work in these fields.

CAREER OPPORTUNITIES

Students who specialize in botany have the academic requirements for several positions with the United States Department of Agriculture and other Federal agencies. When taken adjunctively with another major in the plant sciences, a major in botany should prove most valuable as preparation for numerous State and Federal agencies.

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Botany 305, 323, 375, 380	20
SCIENCE SELECTIONS FROM: Microbiology 350, Entomology 374, Chemistry 340, 341, Plant Pathology 353, Genetics 358	25
FIRST MINOR: To be approved by head of department	10
SECOND MINOR: Must be in the College of Agriculture	10
ELECTIVES	40

CHEMISTRY (CHM)
(Chemistry Building)

Dr. R. A. McCreery, Faculty Adviser, Room 2, Conner Hall

Instruction in this division is designed primarily to fit the needs of agricultural students. By means of lectures, recitations and laboratory work, students are taught the fundamental chemical principles underlying and controlling plant and animal life.

CAREER OPPORTUNITIES

The curriculum for majors in chemistry is designed to prepare students for professional employment in experiment stations, in governmental and industrial chemical or biochemical laboratories, and as chemical or biochemical staff members of colleges, universities, hospitals and allied chemical industries. This curriculum is highly recommended for students seeking professional status and for those who plan to do graduate study. For course descriptions, look under Chemistry in the College of Arts and Sciences.

CURRICULUM FOR THE B.S.A. DEGREE WITH A
MAJOR IN CHEMISTRY
FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
Eng. 101, 102, Speech 108	15	Botany 121, 122	10
Math. 100, 101, 253	15	Math. 254, 255	10
Chem. 121, 122, 223	15	Physics 127, 128	10
Basic ROTC	6	Chem. 380, 340, 341	15
Physical Education 1, 2	6		

JUNIOR AND SENIOR YEARS

	<i>Hours</i>		<i>Hours</i>
Zoology 225 or 226	5	Chem. 426, 427, 442, 480, 580	21
Physics 229	5	Chemistry Electives	6-10*
Chemistry 342, 490 a, b, c	20	Electives in the College	
German 101, 102	10	of Agriculture	23-19
Agronomy 210	5		

- NOTE: (a) A scholastic average of C+ must be made for the freshman and sophomore years in order to continue this curriculum. An average of C+ must be maintained for the entire four years.
- (b) This curriculum meets the prescribed standards of the American Chemical Society for the training of chemists.

AMERICAN CHEMICAL SOCIETY CERTIFICATION: All students who satisfactorily complete this curriculum are automatically certified by the department of chemistry to the American Chemical Society.

DEPARTMENT OF DAIRY SCIENCE (DS)

Head: Henderson. Staff: Clifton, Fosgate, Fowler, Lowenstein, Martin, Miller, Roberts.

The dairy industry in Georgia has been steadily increasing in importance for a number of years. With this growth there has also been an increase in the demand for trained personnel in the various phases of the dairy industry.

CONCENTRATION IN DAIRY PRODUCTION

Dairy Production prepares students for careers: in dairy farm operation as herdsman, manager or owner; in sales of equipment or feed; in field service with processing plants, feed manufacturers, breed associations and marketing agencies; in college research and teaching; etc.

Science Option

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
MAJOR: Dairy Science 379, 390, 392, 394	20
SCIENCE SELECTIONS: Microbiology 350, Genetics 358, Entomology 374, Veterinary Medicine 310, Sociology 431	25

*Any two from Chem. 347, 348, 349, 430, 431, 432.

FIRST MINOR: Animal Science 358, 373	10
SECOND MINOR: Agronomy 321, 356	10
GENERAL ELECTIVES: To be approved by the head of the department .	40

CONCENTRATION IN DAIRY PRODUCTION

Administration Option

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
MAJOR: Dairy Science 379, 390, 392, 394	20
AGRICULTURAL ECONOMICS: 304, 408, 467	15
BUSINESS ADMINISTRATION: Accounting 110, Management 370 and 10 additional hours in business administration	20
SCIENCE SELECTIONS: Microbiology 350, Genetics 358	10
SPECIAL REQUIREMENTS: Economics 312, Finance 330	10
ELECTIVES: To be selected with departmental approval	30

CONCENTRATION IN DAIRY MANUFACTURING

Dairy Manufacturing prepares students for careers in: dairy plant operations such as production, supervision or management; sales of products, supplies and equipment; sanitary engineering; college teaching, research, extension or public relations

Science Option

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
MAJOR: Dairy Science 350, 394, 395, 399	20
SCIENCE SELECTIONS: Microbiology 350, Genetics 358, Entomology 374, Sociology 431 and Economics 312 or Statistics 200	25
FIRST MINOR: Dairy Science 389, 396	10
SECOND MINOR: Food Science 300, 364 or Microbiology 395, 409 . . .	10
GENERAL ELECTIVES: To be approved by the head of the department .	40

CONCENTRATION IN DAIRY MANUFACTURING

Administration Option

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
MAJOR: Dairy Science 350, 394, 395, 399	20
AGRICULTURAL ECONOMICS: 304, 408, 467	15
BUSINESS ADMINISTRATION: Accounting 110, Management 370 and 10 additional hours in business administration	20
SCIENCE SELECTIONS: Microbiology 350, Entomology 374	10
SPECIAL REQUIREMENTS: Economics 312, Finance 330	10
ELECTIVES	30

CONCENTRATION IN SANITARY SCIENCE

Trained personnel in the fields of milk, food, environmental and general sanitation are needed for employment by governmental, public health and regulatory agencies. The need for quality control personnel in dairy and food industries is increasing.

Science Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Dairy Science 350, 394, 395, 396	20
SCIENCE SELECTIONS: Microbiology 350, Chemistry 451, Entomology 374, 376, Statistics 200 or Economics 312	23
FIRST MINOR: Dairy Science 389, Food Science 395	10
SECOND MINOR: Microbiology 410, 422	10
SPECIAL REQUIREMENTS: Agricultural Engineering 104, 105, Political Science 441, 442, 492	19
ELECTIVES: To be selected in consultation with the department head or faculty advisor	23

CONCENTRATION IN DAIRY PLANT MANAGEMENT

(Offered in the College of Business Administration)

For those students who wish to combine a technical knowledge of the dairy manufacturing industry with business administration training, the following special curriculum leading to the degree of Bachelor of Business Administration has been provided with a choice of either a Marketing or a Management sequence.

FRESHMAN AND SOPHOMORE YEARS

	Hours		Hours
English 101, 102	10	English 121-122	10
Mathematics 100 or 101 or 235	10	Electives in Business Administration	5
Chemistry 111-112	10	Political Science 101	5
Economics 105, 106	10	Business Education 108	3
History 111 or 112	5	Accounting 110, 111	10
Business Administration 101, 102	2	Physical Science 101	5
Basic ROTC	3	Business Administration 109	5
Physical Education 1	3	Economics 133	5
		Basic ROTC	3
		Physical Education 2	3

JUNIOR AND SENIOR YEARS

	Hours
Microbiology 350	5
Management 351	5
Business Administration 370, 576	10
Economics 312, 386	10
Finance 326, 330	10
Dairy Science 350, 389, 394, 395, 396, 399	30

MARKETING SEQUENCE

Management 352, Industrial Operations	5
Marketing 560, Principles of Retailing	5
Marketing 563, Advertising and Display	5
Marketing 564, Sales Management	5
Marketing 578, Purchasing	5

MANAGEMENT SEQUENCE

Management 352, Industrial Operations	5
Management 585, Personnel Administration	5
Management 595, Administrative Practices	5
Management 599, Business Policy	5
Marketing 578, Purchasing	5

ENTOMOLOGY (ENT)

(Biological Sciences Building)

Head: Lund. Staff: Beckham, Blum, Brady, Callahan, Coleman, Cox, Crossley, Davis, Ebel, Franklin, French, Harris, Herman, Himel, Hunter, Jordan, Knight, Nolan, Norde, Paul, Starks, Tippins, Tsao, Wallace, Weathersby, Womack, Yates.

Students who specialize in entomology receive training in the identification of insects and the damage they cause, their structure, habits, and control.

CAREER OPPORTUNITIES

It is generally recognized that knowledge of insect control is necessary for the successful growing of either farm plants or farm animals and should, therefore, be a part of the training of all agricultural personnel. In addition many positions in teaching, research, control, and extension entomology exist in colleges and universities, experiment stations, state departments of entomology, the United States Department of Agriculture, the United States Public Health Service, and in various private concerns doing pest control or insecticide compounding or manufacturing. Advanced study leading to advanced degrees and to higher teaching and research positions is also available. The entomology major provides an excellent pre-medical program.

Students who plan to major in entomology should include Mathematics 101 and Chemistry 341 in their freshman-sophomore courses.

CONCENTRATION IN ENTOMOLOGY

Science Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Entomology 225, 370, 371, either 353 or 415, 374, 376. or 382 and one additional five-hour course	30
SCIENCE SELECTIONS FROM: Microbiology 350, Genetics 358 and three additional courses from the following: Botany 375, Botany 380, Geology 125, Plant Pathology 353, Zoology 390, Mathematics 200	25
FIRST MINOR: To be approved by head of department	10
SECOND MINOR: Must be in College of Agriculture	10

ELECTIVES AND SPECIAL REQUIREMENTS 30

To be chosen with the objective of obtaining information that will contribute most to students' basic knowledge for effective work in entomology, and to be approved by the major professor. Philosophy 358 and 10 hours of a foreign language are required.

CONCENTRATION IN ENTOMOLOGY

Administration Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Entomology 225, 370, 371, either 353 or 415, 374, 376, or 382 and one additional five-hour course	30
AGRICULTURAL ECONOMICS: 304, 408, 467	15
BUSINESS ADMINISTRATION: Accounting 110, Management 370 and an additional 10 hours in business administration approved by major professor	20
SCIENCE SELECTIONS: Plant Pathology 353, Genetics 358	10
SPECIAL REQUIREMENTS: Mathematics 200 or Economics 312, Agricultural Economics 469 or Finance 330, Philosophy 358	15
ELECTIVES: To be selected with approval of major professor	15

DEPARTMENT OF FOOD SCIENCE (FS)

(Food Science Building)

Head: Powers. Staff: Carpenter, Flanagan, Hamdy, May, Nakayama and Saffle.

The food processing industry is a 87 billion dollar industry in the United States. The industry is approximately four times larger than the next largest manufacturing industry. Because of the size of the food industry, the high percentage of foods which are marketed as a processed food rather than as a fresh or raw product, because improvements and new developments are the life-blood of the American competitive system, and because other industries closely related to the food industry, such as the packaging industry, employ food technologists—there is a constant demand for college graduates, both men and women, with training in food science.

CURRICULUM

The Department of Food Science offers both undergraduate and graduate instruction designed to give basic, technical training for such industries as canning, freezing, pickling, preserving, meat and poultry processing, and the preparation and preservation of specialty food products. Superior students are encouraged to undertake graduate study because of the greater opportunities open to food scientists with an advanced degree.

CAREER OPPORTUNITIES

Briefly, occupations open to graduates are: research and development work in industry; production work in industry such as in canneries, freezing plants, and meat and poultry processing plants; technical sales within the food field itself or in closely related fields such as the container and equipment manufacturing fields; food in-

spection and grading with federal, state, or municipal agencies; teaching; extension work; research work in experimental stations and in other branches of government; food consulting; and promotional work with public or private utilities.

Food Science majors should take Chemistry 340 (instead of Chemistry 261) (as listed in core curriculum) and Chemistry 341.

CONCENTRATION IN FOOD SCIENCE*

This concentration is designed for students who intend to enter graduate school, work in industrial research and development, or in other activities calling for a high degree of scientific competence.

Science Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Food Science 395, 409, 411, 414	20
SCIENCE SELECTION: Microbiology 350, Chemistry 380, and 15 additional hours to be selected in consultation with departmental adviser . .	25
FIRST MINOR: Any department in the University	10
SECOND MINOR: Any department in the College of Agriculture	10
SPECIAL REQUIREMENT: Food Science 423	5
ELECTIVES	35

Administration Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Food Science 409 and 15 additional hours in food science . . .	20
AGRICULTURAL ECONOMICS: 304, 408, 467	15
BUSINESS ADMINISTRATION: Accounting 110, Management 351, 370 and an additional 5-hour course approved by food science department .	20
SCIENCE SELECTIVES: Microbiology 350 and Mathematics 101 . . .	10
SPECIAL REQUIREMENTS: 10 hours of course work in statistics and finance	10
ELECTIVES	30

*To meet the minimum requirement recommended by the Institute of Food Technologists for a major in food science, a student should follow the Food Science Concentration and should select his freshman-sophomore agricultural electives and general electives, the science selectives, the minors and junior-senior electives such that he will reach the following levels of attainment: Chemistry 121, 122, 223, 340, 341, 380, 451, 490a, 490b and 490c; Mathematics 100, 101, 254, and 255; Physics 127, 128, and one additional 5-hour course in physics; 25 hours in biological science, including Microbiology 350 and Food Science (Microbiology) 395; 15 hours of Unit Operations (Agricultural) Engineering 212, 213 and 430 and certain other courses in engineering, physics, or food science; 25 hours of food science courses; 15 hours in English and speech; and not less than 24 hours in economics, the humanities, and social science. By proper selection of courses, a student can comply with all the requirements of the curriculum of the College of Agriculture and the recommended curriculum of the Institute of Food Technologists. Variations from the course of study recommended by the Institute of Food Technologists are permitted — in consultation with the major adviser — provided the program meets the general requirements of the College of Agriculture.

DEPARTMENT OF HORTICULTURE (HOR)

Division Chairman and Head: Johnstone. Staff: Couvillon, Pokorny, Rutland, Sparks.

The Department of Horticulture offers courses designed to train young men and women for jobs in both the business and science of horticulture. For this purpose, and in keeping with modern trends, there are two general options which may be followed.

CAREER OPPORTUNITIES

The administration option is designed for those students desiring to farm with vegetable, fruit, flower or nursery crops; to manage contracting or landscape nurseries; to enter the retail or wholesale florist business; or to become associated with business supplying or serving horticultural industries.

The science option is designed primarily for persons going into research or instruction. Usually such students sooner or later work toward advanced degrees. However, there are terminal positions as scientific aids, technicians, inspectors in regulatory services, fieldmen for canneries, technical representatives with allied industries, etc.

Within each of the above two general options, students may also concentrate in one of the several natural divisions of horticulture. These are floriculture, ornamental horticulture, pomology (fruit crops), and olericulture (vegetable crops).

CONCENTRATION IN HORTICULTURE (1)

Administration Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Selected junior and senior courses in horticulture	20
AGRICULTURAL ECONOMICS: 304, 308, 467	15
BUSINESS ADMINISTRATION: Accounting 110, Management 370, and 10 other selected hours approved by adviser	10
SCIENCE SELECTIONS FROM: Microbiology 350, Botany 380, Entomology 374, Plant Pathology 353 and Genetics 358	10
SPECIAL REQUIREMENTS: Economics 312, Finance 330, or Agricultural Economics 469	10
ELECTIVES: Approved by faculty adviser	40

CONCENTRATION IN HORTICULTURE (2)

Science Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Selected junior and senior courses in horticulture	20
SCIENCE SELECTIONS FROM: Microbiology 350, Botany 323, 380, Plant Pathology 353, Genetics 358, Entomology 374	25
FIRST MINOR: To be approved by head of department. Two junior or senior courses in any one department of the University	10

SECOND MINOR: Two junior or senior courses in any department of the College of Agriculture. To be approved by head of department . . . 10
ELECTIVES: Approved by faculty adviser 40

MICROBIOLOGY
(Biology Science Building)

Dr. J. E. Giddens, Faculty Adviser, Rm. 20, Conner Hall
This concentration known as microbiology is open to any junior or senior in the College of Agriculture. It is a combination of microbiology courses selected from departments in the College of Agriculture, College of Arts and Sciences and the School of Veterinary Medicine.

CAREER OPPORTUNITIES

The science option in microbiology is recommended for students who wish to prepare themselves for graduate study or for employment in the fields of bacteriology, microbiology, mycology or nematology.
Students who follow this curriculum should include Mathematics 101 and Economics 105 in the freshman-sophomore years of the basic B.S.A. curriculum.

CURRICULUM FOR THE B.S.A. DEGREE WITH
A MAJOR IN MICROBIOLOGY
JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Microbiology 350, 461; 389 or 411; 395 or 421	20
SCIENCE SELECTIONS: Plant Pathology 353, Genetics 358, Nutrition 358, Botany 380 or Zoology 390 or Veterinary Physiology 310, and one other science course to be selected	25
FIRST MINOR: Plant Pathology 420, 421, 423, 425, 426 (any two)	10
SECOND MINOR: Two senior division courses in any department in the University	10
SPECIAL REQUIREMENTS: Classics 310 and any three of the following: Bacteriology 409, 410, 422, 470, 480	20
ELECTIVES	20

DEPARTMENT OF PLANT PATHOLOGY (PAT)
AND PLANT GENETICS (GEN)
(Food Science Building, South Campus)

Division Chairman and Head: Luttrell. Staff: Browne, Campbell, Fleming, Hanlin, Hendrix, Kozelnicky, Kuhn, Marx, Papa, Powell, Roncadori, Ross, Ruehle.
This department offers training in the following areas: (1) Principles governing the development of disease in plants and the application of disease control measures in the production of agricultural crops and in forest management, (2) The basic sciences of mycology, nematology, and virology, (3) The basic science of genetics, (4) Principles and methods of plant breeding used in the improvement of cultivated plants. Courses in this department contribute to the general education of majors in

the biological sciences, agronomy, horticulture, forestry, animal science, pre-veterinary medicine, dairy science, poultry science, and education.

CAREER OPPORTUNITIES

Students are prepared for teaching, research, technical, promotional, and extension positions in colleges, in state and federal governmental agencies and research institutions, and in industry. Since the most attractive positions open to specialists in plant pathology and plant genetics increasingly require advanced degrees, students planning to major in these areas should consult the head of the department as early as possible in their college careers to insure selection of courses that will furnish an adequate foundation for admission to graduate school. The following suggested courses of study may be modified with departmental approval to meet the needs of individual students.

CONCENTRATION IN PLANT PATHOLOGY

Science Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Plant Pathology 353 and three of the following: Plant Pathology 356, 420, 421, 423, 425, 426	20
SCIENCE SELECTIONS FROM: Microbiology 350, 461, Biochemistry 451, Botany 375, 380, Economics 312 or Mathematics 200, Entomology 374, Genetics 358	25
FIRST MINOR: May be in any one department of the University	10
SECOND MINOR: Must be in the College of Agriculture	10
ELECTIVES: Selected with departmental approval (Classics 310, German, French, or Spanish 103-104, Philosophy 258, Psychology 101 recommended)	40

CONCENTRATION IN PLANT PATHOLOGY

Administration Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Plant Pathology 353 and three of the following: Plant Pathology 356, 420, 421, 423, 425, 426	20
AGRICULTURAL ECONOMICS: 304, 408, 467	15
BUSINESS ADMINISTRATION: Accounting 110, 111, Marketing 360, Management 370	20
SCIENCE SELECTIONS FROM: Microbiology 350, Biochemistry 451, Botany 375, 380, Economics 105, Entomology 374, Mathematics 101, 253, Sociology 433	10
SPECIAL REQUIREMENTS: Agricultural Economics 469 or Finance 330, Mathematics 200 or Economics 312	10
ELECTIVES: Selected with departmental approval (Accounting 315, Psychology 101 recommended)	30

CONCENTRATION IN GENETICS

Science Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Genetics 358, 401, 402, 404	20
SCIENCE SELECTIONS FROM: Microbiology 350, 461, Biochemistry 451, Botany 375, 380, Economics 312 or Mathematics 200, Entomology 374, Plant Pathology 353	25
FIRST MINOR: May be in any one department of the University	10
SECOND MINOR: Must be in the College of Agriculture	10
ELECTIVES: Selected with departmental approval (Classics 310, German, French, or Spanish 102-104, Management 370, Philosophy 258, Psychol- ogy 101 recommended)	40

CONCENTRATION IN GENETICS

Administration Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Genetics 358, 401, 402, 404	20
AGRICULTURAL ECONOMICS: 304, 408, 467	15
BUSINESS ADMINISTRATION: Accounting 110, 111, Marketing 360, Management 370	20
SCIENCE SELECTIONS FROM: Microbiology 350, Biochemistry 451, Bot- any 375, 380, Economics 105, Entomology 374, Mathematics 100, 253, Sociology 433	10
SPECIAL REQUIREMENTS: Agricultural Economics 469 or Finance 330, Mathematics 200 or Economics 312	10
ELECTIVES: Selected with departmental approval (Accounting 315, Psy- chology 101 recommended)	30

DEPARTMENT OF POULTRY SCIENCE (PS)

(Livestock-Poultry Building, South Campus)

Division Chairman and Head: McCartney. Staff: Edwards, Fuller, Huston, May, Noles, Reid, Washburn, Wheeler; Associate Staff: Kleckner, Richey, Schmittle, Tindell.

The courses in the Poultry Science Department are designed to prepare the student for work in the poultry industry, its allied fields, and to pursue graduate study.

CAREER OPPORTUNITIES

Students who major in this department receive training that will prepare them for work in the following fields:

- 1. Commercial poultry production.
- 2. The feed industry: diet formulation, sales and service and quality control.
- 3. The processing industry: plant operation and personnel management.

- 4. Experiment Station and Extension specialist.
- 5. The hatchery business: Incubation and hatching egg production.
- 6. Advance study leading to the M.S. and Ph.D. in the fields of poultry nutrition, genetics, market products technology, disease and parasites, and physiology.

RESEARCH LABORATORIES

The Southern Regional Poultry Genetics Laboratory is located at the University of Georgia. Here the results of research in poultry breeding at the 13 Southern Experiment Stations and Puerto Rico are brought together for evaluation and comparison. This activity focuses the attention of poultry breeders all over the country on the University of Georgia and its poultry program.

Students majoring in poultry have opportunities for experience in poultry disease diagnosis. Facilities for the study and diagnosis of diseases include the University of Georgia Poultry Disease Research Center, The Southeastern Poultry Research Laboratory and The School of Veterinary Medicine.

The poultry industry in Georgia ranks first among the agricultural enterprises which bring the greatest cash income to the farmers. The demand for well trained men in poultry far exceeds the number of graduates. The industry is growing constantly and as it grows the demand for trained men also increases.

CONCENTRATION IN POULTRY SCIENCE

Science Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Poultry Science 371, 373, 379, 380 and an additional 5 hours in poultry science	21
FIRST MINOR: Any department in the College of Agriculture	10
SECOND MINOR: Chemistry 341, 380	10
SCIENCE ELECTIVES: Microbiology 350, Genetics 358, Poultry Science 358, and other 10 hours on the list of approved science selections . . .	25
GENERAL ELECTIVES	39

CONCENTRATION IN POULTRY SCIENCE

Administration Option

JUNIOR AND SENIOR YEARS

	Hours
MAJOR: Poultry Science 371, 373, 379, 380 and an additional 5 hours in poultry science	21
AGRICULTURAL ECONOMICS: 304, 310, 467	15
BUSINESS ADMINISTRATION: Accounting 110, Management 370 and an additional 10 hours selected with departmental approval	20
SCIENCE SELECTIONS: Microbiology 350, Genetics 358, and Poultry Science 358	15
SPECIAL REQUIREMENTS: Mathematics 200 or 357 or Economics 312, Agricultural Economics 469 or Finance 330	10
ELECTIVES: Selected with departmental approval	24

II. BACHELOR OF SCIENCE IN AGRICULTURAL ENGINEERING (AEN)

(Agricultural Engineering Center, South Campus)

Division Chairman and Head: Brown. Staff: Allison, Cobb, Harris, McLendon, Perry, Ratterree, Reed, Rice, Rodgers, Smith, White.

Agricultural Engineering is the branch of the engineering profession that concerns itself with the problems of agriculture which are engineering in nature. Modern agriculture with its emphasis on diversity, automation, efficiency, quality, and abundant production presents an increasingly large variety of complex engineering problems. In answer to this and similar challenges, modern science and technology have produced advanced concepts of energy conversion, new materials and new manufacturing techniques, and have greatly extended man's ability to control environment.

Thus far Agricultural Engineers have brought engineering to agriculture by introducing into the industry the use of mobile mechanical power, electrical energy with its related controls and equipment, new structural designs, environmental control and new policies and techniques in land and water use. In addition, there have been applications of solar energy, atomic energy, electromagnetic radiations and the advancements in the science and art of engineering systems design as applied to the handling, storage, processing, and marketing of agricultural products.

CURRICULUM

The courses comprising the four-year professional curriculum — Bachelor of Science in Agricultural Engineering — provide well balanced training in the basic sciences, engineering sciences, engineering design and analysis, and in the humanistic and social sciences. The curriculum is accredited by the Engineer's Council for Professional Development. The department also offers a program of graduate study leading to the degree Master of Science. The graduate program places emphasis upon advanced study in science and engineering and upon the methods and practices of research.

CO-OP PLAN

A Cooperative Plan is available to engineering students. The Co-op student alternates work and academic quarters and is eligible to enter this plan after having completed a minimum of five academic quarters.

CAREER OPPORTUNITIES

The need for trained engineers continues to increase from year to year, and B.S.A.E. graduates are engaged in a variety of activities. In general their occupations are about as follows: 42% are in industry with machinery companies, feed manufacturers, electric power suppliers, building material suppliers, etc.; 20% are in government service with the SCS, ARS, AMS activities of USDA; 10% are engaged in teaching, research, or extension at colleges and universities; 20% are self-employed either as consultants, contractors, or sales engineers; and 8% choose a career in some branch of the Armed Forces.

CURRICULUM IN AGRICULTURAL ENGINEERING

FRESHMAN

FALL		WINTER		SPRING	
	<i>Hours</i>		<i>Hours</i>		<i>Hours</i>
Eng'r. Graphics,		Eng'r. Graphics,		Eng'r. Graphics,	
AEN 104	2	AEN 105	2	AEN 108	2
Composition, Eng. 101...	5	Chemistry, CHM 122...	5	Eng'r. Shop, AEN 102...	3
Chemistry, CHM 121....	5	Composition, ENG 102...	5	Pub. Speaking, SPC 108..	5
Alg. or Trig., MAT 100		Anal. Geom. MAT 253..	5	Calculus, MAT 254	5
or 101	5	Basic ROTC	1	Fld. Crop. Prod.,	
Basic ROTC	1	Physical Educ., PED 1...	1	AGY 101	3
Physical Educ., PED 1...	1			Basic ROTC	1
Seminar, AEN 190	1			Physical Educ., PED 1...	1

SOPHOMORE

FALL		WINTER		SPRING	
	<i>Hours</i>		<i>Hours</i>		<i>Hours</i>
Calculus, MAT 255	5	Calculus, MAT 256	5	Dif. Equations,	
Physics, PCS 137	5	Physics, PCS 138	5	MAT 401	5
Hum.-Soc. Studies	5	Hum.-Soc. Studies	3	Physics, PCS 239	5
Surveying, AEN 211....	3	Prin. of Soils, AGY 210..	5	Hum.-Soc. Studies	5
Basic ROTC	1	Basic ROTC	1	Eng'r. Econ., AEN 340...	3
Physical Educ., PED 2...	1	Physical Educ., PED 2...	1	Basic ROTC	1
				Physical Educ., PED 2...	1

JUNIOR

FALL		WINTER		SPRING	
	<i>Hours</i>		<i>Hours</i>		<i>Hours</i>
Statics., AEN 350	5	Dynamics, AEN 351	5	Fluid Mech., AEN 356...	5
Thermo., AEN 373	4	Heat Transfer, AEN 374.	4	Eng'r. Materials,	
D.C.Mach., AEN 384....	3	A.C. Mach., AEN 386 ...	4	AEN 353	4
Hum.-Soc. Studies	5	St. of Mat., AEN 355....	5	Electronics, AEN 387...	4
				Int. Systems, Anal.,	
				AEN 357	4

SENIOR

FALL		WINTER		SPRING	
	<i>Hours</i>		<i>Hours</i>		<i>Hours</i>
Agri. Mach., AEN 361...	4	Agri. Power, AEN 362...	4	Rural Elec. AEN 388...	4
S & W Eng'r., AEN 325...	5	Farm St. Des., AEN 371..	4	Eng'r. Proc. AEN 375...	4
Hum.-Soc. Studies	5	Hum.-Soc. Studies	3	Mach. Des., AEN 363 or	
Technical Electives	3	Technical Electives	6	St. Des., AEN 377....	4
Seminar, AEN 392	0			Technical Electives	6

Total requirements are 211 hours, exclusive of the required courses in basic ROTC and Physical Education 1-2. Students electing advanced ROTC may not use such courses in fulfillment of the degree requirements.

Technical Electives are to be chosen from the following courses: AEN 326, 329, 341, 352, 354, 358, 359, 363, 376, 377, 380, 393, and MAT 458, 459.

An approved sequence of humanistic-social studies may be selected from the following courses: Agricultural Economics 110, 310; Political Science 101; History 100, 111, 112; Sociology 105, 373, 380, 435; Philosophy 305, 357, 408; Psychology 101, 371, 414; English 121, 122; and modern foreign language, 10 hours.

Admission requirements include the following science courses: chemistry 1 unit; physics 1 unit; mathematics consisting of algebra 2 units, advanced algebra $\frac{1}{2}$ unit; trigonometry $\frac{1}{2}$ unit; and plane geometry 1 unit.

III. DEPARTMENT OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL DESIGN (LAR)

(Landscape Architecture Building North Campus)

Division Chairman and Head: Owens. Staff: Beery, Cothran, Haynes, Hill, Linley, Nicholls, Reader.

Landscape architecture is the art of adapting land to human use and enjoyment. It is a blend of the rational and the intuitive, of analysis and insight, of the scientific and the artistic. The practicing landscape architect must join solid knowledge and rational thought process with insight and imagination to solve problems of land use. His materials are earth, water, construction materials and living plants. His tools are the artistic techniques of visual presentation, fundamental engineering processes, basic horticultural skills, and understanding and sympathy with the dynamics of the natural environment. The product of his work must be an artistic creation which is functionally satisfying.

Increasingly the landscape architect finds it necessary to work with members of the other service professions to tackle, as a team, the broad and expanding problems of land planning. He must, therefore, have some understanding of and sympathy with the members of other professions, such as architects, artists, engineers, planners, sociologists, economists and public administrators. He should be thoroughly competent in his own professional field, and also be able to take his place as a well-rounded member of the community.

CURRICULUM

The studies offered in landscape architecture at the University of Georgia are built around a curriculum designed to train young men and women for professional practice. The general program leading to the degree of Bachelor of Landscape Architecture is accredited by the American Society of Landscape Architects. This concentration is four years and two additional quarters in duration. The department offers two other curricula, one in recreation planning in cooperation with the School of Forestry, and another specializing in problems of landscape operations. These may be elected upon completion of the sophomore year.

FIELD TRIPS

Two supervised field trips are required. During the last two years students travel, at their own expense, to designated places of landscape interest in Georgia and adjoining states accompanied by a member of the teaching staff. Visiting critics and lecturers are often invited to supplement the staff's offerings.

PROGRAMS OF INSTRUCTION

1. General Program in Landscape Architecture. This program, leading to the degree of Bachelor of Landscape Architecture, is intended to fit students for the professional practice of landscape architecture.
2. Program In Recreational Planning. This is a program leading to the degree of Bachelor of Science in Landscape Architecture devoted particularly to the design and management of large recreational areas and forest preserves.

3. Program In Landscape Operation. This program for the degree of Bachelor of Science in Landscape Architecture is set up to give intensive study of the problems of design, management, and maintenance of home grounds, estates and parks.

THE FOLLOWING CORE CURRICULUM IS REQUIRED OF ALL STUDENTS MAJORING IN LANDSCAPE ARCHITECTURE

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101	5	History 111	5
Mathematics 100-101	10	Horticulture 101	5
Agric. Engineering 210	5	Landscape Arch. 350-357 . . .	10
Landscape Arch. 255-256-257 .	15	Landscape Arch. 200-201-202 .	15
Landscape Arch. 272-273 . . .	10	Art 120	5
Basic ROTC	6	Landscape Arch. 351	5
Physical Education 112	6		
1ST YEAR SUMMER TERM		2ND YEAR SUMMER TERM	
Botany 121	5	English 121	5
English 102	5	History 112	5
3RD YEAR — SUMMER		FIELD TRIPS	
Practical experience	1	Practical experience	2

BACHELOR OF LANDSCAPE ARCHITECTURE

I. GENERAL PROGRAM

JUNIOR AND SENIOR YEARS

	<i>Hours</i>		<i>Hours</i>
Landscape Arch. 315-316-317 . .	15	Landscape Arch. 318-319 . . .	10
Landscape Arch. 320	5	Landscape Arch. 322-333 . . .	10
Physical Science Electives . . .	10	Landscape Arch. 453	5
Landscape Arch. 340	3	Art Electives	5
Landscape Arch. 352-354 . . .	10	Landscape Arch. 323	5
Art 341	5	Landscape Arch. 355	5
		Landscape Arch. 358	5

BACHELOR OF SCIENCE IN LANDSCAPE ARCHITECTURE

II. RECREATION PLANNING

JUNIOR AND SENIOR YEARS

	<i>Hours</i>		<i>Hours</i>
Landscape Arch. 352	5	Landscape Arch. 340	3
Landscape Arch. (Studio Courses)	30	Landscape Arch. (Studio Courses)	25
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BACHELOR OF SCIENCE IN LANDSCAPE ARCHITECTURE

III. LANDSCAPE OPERATION

JUNIOR AND SENIOR YEARS

	<i>Hours</i>		<i>Hours</i>
Chemistry 121 or		Landscape Arch. 340 . . .	3
Geography 104	5	Landscape Arch. 354-364 . .	10
Landscape Arch. 352 . . .	5	Landscape Arch. 355 . . .	5
Approved Electives	30	Approved Electives	30
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The Franklin College
of Arts and Sciences

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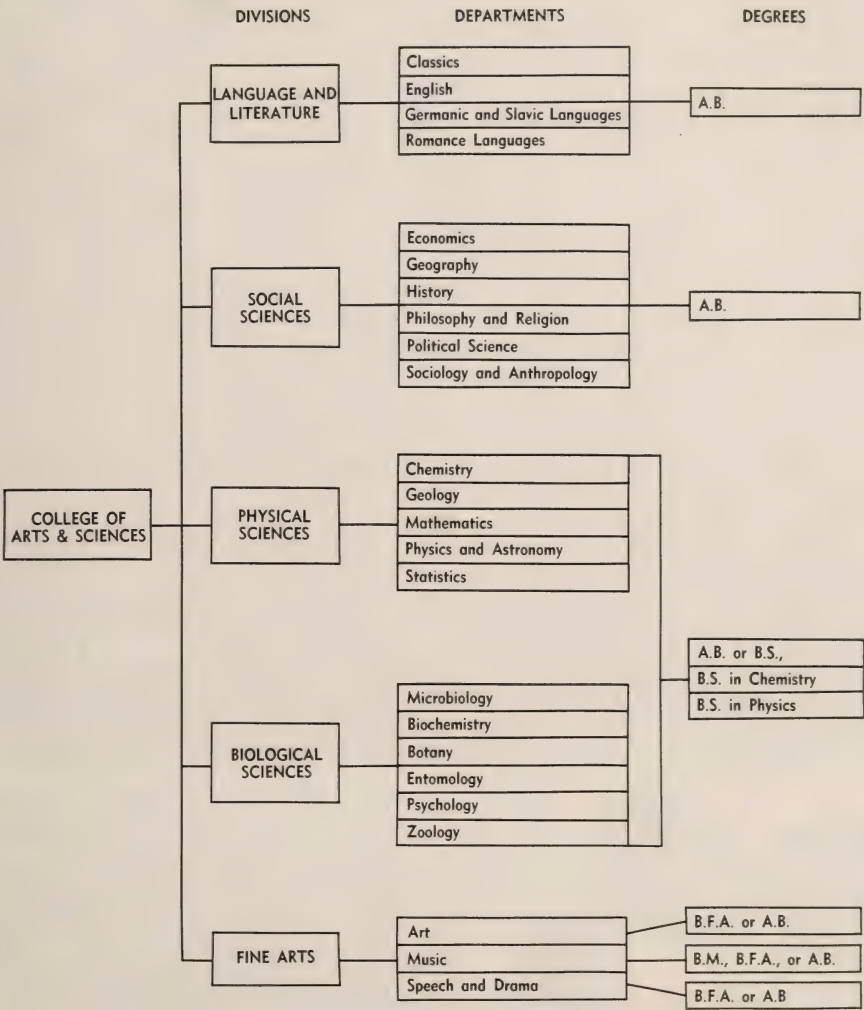
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B.S.-D.V.M.
B.S.-B.S. in Engineering

SECONDARY EDUCATION PROGRAM
Provisions for professional teaching certificates in all divisions of Arts and Sciences.

PRE-PROFESSIONAL PROGRAMS
A.B.-Social Work
Pre-Law
Pre-Seminary
Pre-Pharmacy
Pre-Veterinary Medicine
B.S.-Medical Technology
Nursing
Pre-Dentistry
Pre-Optometry
Pre-Physical Therapy



The Franklin College of Arts and Sciences

JOHN OLIN EIDSON, A.B., M.A., Ph.D., Litt.D., Dean

*HOWARD TEMPLETON COGGIN, A.B., M.S., Ph.D., Assistant to the Dean

CHARLES WILLIAM JAMES, B.S., M.S., Ph.D., Assistant to the Dean

General Information

The objective of the College of Arts and Sciences is to offer the student a liberal education, providing a background in all of the basic academic disciplines and fields of human knowledge before he begins advanced work in his specialty. The College strives to develop the student's resourcefulness to enable him to adapt to changing conditions and to approach problems intelligently. The College also provides the student an opportunity to concentrate in fields of study that may form a foundation for various professional pursuits.

CURRICULUM

The curricula of the College of Arts and Sciences for the freshman and sophomore years, except for a few elective courses, are fairly uniform and are required of all students. In the junior and senior years, concentration in one or more of several fields of study is required. These fields of concentration are:

DIVISION OF BIOLOGICAL SCIENCES: The departments of Biochemistry, Botany, Entomology, Microbiology, Psychology, and Zoology.

DIVISION OF FINE ARTS: The departments of Art, Music, and Speech and Drama.

DIVISION OF LANGUAGE AND LITERATURE: The departments of Classics, English, Germanic and Slavic Languages, and Romance Languages.

DIVISION OF SOCIAL SCIENCES: The departments of Economics, Geography, History, Philosophy and Religion, Political Science, Sociology and Anthropology.

DIVISION OF PHYSICAL SCIENCES: The departments of Chemistry, Geology, Mathematics, Physics and Astronomy, and Statistics.

FACILITIES

The facilities of the College of Arts and Sciences embrace several buildings with adequate classrooms and laboratories for teaching the wide variety of subjects offered by the College. The majority of these buildings are situated on north campus and are adjacent to the Main Library of the University. Old College Building houses the administrative offices. The Visual Arts Building, Moore College Building, Park Hall, Bishop House, LeConte Hall, Peabody Hall and the New College Building house the teaching facilities. In addition, the College of Arts and Sciences also uses the facilities of the modern Science Center which is located on south campus.

* Deceased, June 7, 1967

DEGREES OFFERED

The following degrees are offered by the College of Arts and Sciences. All work is taken in the divisions listed previously, with the exception of fifteen hours of professional credit which may be taken as electives.

BACHELOR OF ARTS, for which the major division may be Language and Literature, Social Sciences, Biological Sciences, Physical Sciences, or Fine Arts.

BACHELOR OF SCIENCE, for which the major division must be Physical Sciences or Biological Sciences.

BACHELOR OF SCIENCE IN CHEMISTRY, for which the major subject must be Chemistry.

BACHELOR OF SCIENCE IN PHYSICS, for which the major subject must be Physics.

BACHELOR OF FINE ARTS, for which the major division must be Fine Arts.

BACHELOR OF MUSIC, for which the major subject must be Music.

Combined Degree Programs

In the combined degree programs offered by the College of Arts and Sciences in cooperation with other schools and colleges, a student of superior scholastic standing may, after three years of work in the College of Arts and Sciences, be accepted for study in a professional school. After satisfactory completion of his first year in this school, the student may receive an A.B. or B.S. degree. He may then continue to work toward the degree in his chosen field.

The following combined degree programs are offered:

Bachelor of Science and Doctor of Medicine, offered in cooperation with the Medical College of Georgia.

Bachelor of Science and Doctor of Veterinary Medicine, offered in cooperation with the School of Veterinary Medicine at the University.

Bachelor of Science and Bachelor of Science in Engineering, offered in cooperation with Georgia Institute of Technology.

Pre-Professional Programs

The College of Arts and Sciences also offers pre-professional programs as a foundation for study in the fields listed below. For further information on these programs see *Pre-Professional Programs* at the rear of this section.

Dentistry, Optometry or Physical Therapy

Nursing

Pharmacy

Social Work

Theology

Veterinary Medicine

GRADUATE STUDY

Students interested in graduate work are advised to consult with the head of the department in which the student is majoring. Complete information on graduate degrees and admission requirements are found in the Graduate School Bulletin.

THREE-YEAR MASTER'S DEGREE PROGRAM

The University has a Three-Year Master's Degree Program designed for students who plan to become college teachers. The program combines the junior and senior years of undergraduate work and the first year of graduate study into one educational experience. This program, supported by a grant from the Ford Foundation, aims to prepare the student for junior college teaching immediately and to prepare him for further doctoral work. It also shortens the usual time between the master's degree and the doctorate.

Interested students should apply to Dr. George O. Marshall, Jr., Director, Office of the Three-Year Master's Degree Program, Room 210, Old College.

HONORS PROGRAM

DIRECTOR: Lothar L. Tresp

Charles Darby, William Free, Counselors, A.B. Degree Program; Gayther Plummer, Counselor, B.S. Degree Program; Richard S. Scott, Counselor, B.B.A. Degree Program; Richard O'Brien, Counselor, A.B.J. Degree Program.

An Honors Program, inaugurated in 1960, is administered by the Director and an Honors Council.

Student admission to the Honors Program is only on the basis of a superior academic record. Beginning freshmen are admitted on the basis of high school grades, scores on the CEEB Scholastic Aptitude tests, and placement and qualifying examinations administered by the University.

Admission for all other students is based on grades made at the University. To be admitted to the program and to remain in it, a student should have a cumulative scholastic average of 88, or have a reasonable prospect of attaining such an average.

Honors Program students may enroll in special sections of most of the basic beginning courses of the College. Limited in size and taught in seminar fashion by the most experienced members of the faculty, these courses are designed for the student of superior abilities. There are a number of such courses in the Senior Division Honors Program as well as several inter-departmental colloquia.

Successful completion of the Junior Division (freshman-sophomore) Honors Program normally involves taking a minimum of six honors courses, distributed between the humanities, the natural sciences, and the social sciences, and the achievement of the minimum cumulative average of 88 in all academic work. Such students are awarded the Junior Division Honors Program Certificate. Completion of the Senior Division Honors Program as well entitles the student to graduation with honors, provided his academic performance is sufficiently high.

New types of Senior Division honors were introduced in 1960. In cases where departments of the College split their mixed undergraduate-graduate (or 400/600) courses into 400 sections for under-graduates and 600 sections for graduates, honors juniors and seniors are eligible to be enrolled in the 600 sections. In some cases, honors juniors and seniors may "challenge" courses (take the final examination without attending the lectures), and if successful on the examination receive credit towards graduation for the course. Some departments of the College have introduced H-498 and H-499 courses for honors juniors and seniors. The student

taking an H-498 course receives 5 quarter hours credit for pursuing a program of guided reading or carrying out a guided project during one quarter. The student taking an H-499 course received 5 quarter hours credit for writing an undergraduate thesis during one quarter.

A student interested in Honors work should apply at the Honors Program Office (210 Old College) for a copy of the Honors Program Student Handbook.

ADVANCED PLACEMENT

Students who enter the University with good records on the Advanced Placement Program of the College Entrance Examination Board are given credit for the courses which they have had on this program and are placed in advanced courses in the respective subjects.

In addition to the program of the CEEB, the University has its own Advanced Placement Program, by which qualified freshmen can exempt elementary courses in chemistry, English, mathematics, modern foreign languages, political science, and biology. In each of these subjects, freshmen can get college credit for the courses which they exempt by examination. Advanced Placement Examinations are given during Summer Orientation for Freshmen.

Students are encouraged to exempt elementary courses and go on to more advanced work in all areas in which they are qualified to do so.

Degree Requirements

All students should acquaint themselves with degree requirements applicable to all schools and colleges of the University as set down in the General Information section of this catalogue. The minimum requirement for the College of Arts and Sciences is 195 quarter hours.

ACADEMIC ADVISERS

Each undergraduate student in the College of Arts and Sciences is assigned a faculty member who will be his academic adviser. The assignment is made according to the expressed academic interests of the student. The adviser assists the student in registration, and is available during his office hours to counsel with the student about his study methods, progress, plans, and any other matters related to his academic program.

Each student is scheduled for a conference with his adviser at least once each quarter. At the end of the sophomore year, the student is referred to the appropriate department for counseling concerning his senior division work.

SELECTING A MAJOR

On or before registering for the junior year, the student must select the degree for which he is a candidate, the division of the College in which he will take his major work, and the subject in this division in which he expects to major.

The professor in charge of the student's major subject is known as the student's major professor. All courses constituting the student's major division program, must be approved by this adviser. This program becomes a requirement for the degree

when it is approved by the Dean of the College of Arts and Sciences. To be official, all approvals must be in writing and filed in the Registrar's records.

MAJORS IN FOREIGN AREAS

On the advice of their major professor, students may select majors dealing with specific areas outside the continental United States. This option is designed to provide both a cultural background and more intensive study of foreign areas than is possible within a major taken exclusively in a single department, and an undergraduate preparation for advanced studies in foreign areas or international relations. The student desiring to concentrate in a foreign area should major in one of the following subjects: economics, geography, history, foreign languages, or political science. He should consult with the major professor in one of the above departments to select courses from related departments. A minimum of 20 hours of courses numbered 200 or above must be taken in the major, and elective courses should be taken in related fields. All other requirements for the A.B. degree must be met. It is strongly recommended that the student complete 10 hours in one modern foreign language in courses numbered 200 or above which emphasize speaking and writing.

CANDIDACY FOR A DEGREE

The College of Arts and Sciences reserves the right to refuse candidacy for a degree to any student, regardless of the number of hours of credit the student may have, if his performance on the Sophomore Comprehensive Examination is unsatisfactory or if he has failed to satisfy all specified junior division courses required in freshman and sophomore years, except those in Item 4C, page 89, or if he has failed to meet requirements regarding the Georgia Constitution and American and Georgia history.

After a student has earned 140 academic hours and has met the qualifications required for the candidacy for a degree, he should apply for graduation in the Registrar's Office. This should be done three quarters before graduation.

TRANSFER STUDENTS

Students transferring from standard colleges and universities with junior classification will not be required to take the non-laboratory science courses offered in the freshman and sophomore years, provided their transcripts show that they have completed an equivalent number of hours in the subjects covered by these courses.

Students transferring from any of the junior colleges or other units of the University System to the College of Arts and Sciences are given full credit for all regular curriculum work completed with satisfactory grades. Any uncompleted required courses in the freshman and sophomore years must be taken.

ACADEMIC WORK LOAD

The normal load of work is 16 academic hours, except in a few programs in which 18 hours are required. For the conditions under which extra hours may be taken, see General Information section.

ELECTIVE COURSES

For all degrees in the College of Arts and Sciences all courses in the University are open as electives. Not more than fifteen elective hours credit will be allowed for professional courses in the professional schools, except in the degrees with special provision for the teaching certificate.

Bachelor of Arts and Bachelor of Science Degrees

The main purpose of the curricula for these degrees is to provide the student with a broad grounding in the basic fields of human knowledge, to aid in developing an appreciation for cultural pursuits, and to prepare the student for advanced study in the various liberal arts fields and for matriculation in graduate and professional schools.

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE

Advisers: Mrs. Phyllis Barrow, William F. Boggess, John V. Glass, Walter H. O'Briant, William Paul, Lindsey Rogers, Donald R. South, and Elizabeth Watkins.

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	Literature	10
Mathematics 100 and either		(See Item 1B)	
Mathematics 101, 200, 235		History 111-112	10
or Philosophy 258	10	Laboratory Science	10
(See Item 2A)		(See Item 2B)	
Political Science 101	5	Social Studies	15
Foreign Language 103-104	10	(See Item 4C)	
(See Item 1D)		Basic ROTC	6
Science (non-laboratory*)	10	Physical Education 1-2	6
(See Item 2B)			

JUNIOR AND SENIOR YEARS

93-96 hours of required and elective junior and senior division courses to give a minimum of 195 hours.

REQUIREMENTS FOR BACHELOR OF SCIENCE DEGREE

Advisers: William M. Carlton, LaFiece D. Collins, Barney A. Daughtry and Jane Durisek.

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	Literature	10
Mathematics 100-101	10	(See Item 1B)	
Political Science 101	5	History 111-112	10
Foreign Language 103	5	Laboratory Science	15
(See Item 1D)		Laboratory Science and/or	
Science (non-laboratory*)		Mathematics	5-10
and laboratory)	15	(See Item 2B)	

*A non-laboratory science requirement may be substituted by a laboratory science in the same subject.

Basic ROTC	6	Social Studies	0-10
Physical Education 1-2	6	(See Item 4C)	

JUNIOR AND SENIOR YEARS

93-99 hours of required and elective junior and senior division courses to give a minimum of 195 hours.

TOTAL REQUIREMENTS FOR A.B.
AND B.S. DEGREES

(Unless otherwise specified the requirements are for both the A.B. and B.S. degrees)

	Hours
1. LANGUAGE-LITERATURE	25-40
A. English 101-102	(10)
A grade of C or better is required in 101 and an average of C is required in the two courses.	
B. Literature	(10)
Two courses from the following: English 121-122, "Western World Literature"; or French 201-202; or German 201-202; or Italian 201-202; or Spanish 201-202.	
C. Classical Culture	(10)
This requirement is for Bachelor of Arts students only and may be satisfied by one 10-hour sequence from the following:	
Classical Culture 301-302.	
Honors courses (H-305 and H-306) may substitute for the classical culture sequence. Classical Culture 456 or 457 may substitute for Classical Culture 301.	
If Latin or Greek is elected to meet the foreign language requirement (See Item D), the student is exempt from the classical culture requirement.	
D. Foreign Language	(5-10)
Requirements for A.B. Students:	(10)
Courses 103 and 104 in a modern foreign language or courses 203 and 304 in Greek or Latin are required.	
Requirements for B.S. Students:	(5)
Course 103 in a modern foreign language or course 203 in Greek or Latin is required.	
College Credit by Exemption for A.B. and B.S. Students:	
A student continuing a foreign language taken in high school will be placed in the appropriate course on the basis of placement tests and other pertinent information. If a student is placed in 104 he will receive credit for 103 (5 hours) and if he is placed in 201 of a modern foreign language he will receive credit for 103 and 104 (10 hours). No credit will be allowed for the exemption of 101 and 102, but college credit earned in 101 and 102 may be used as free electives	

toward graduation. No student may receive credit for any course which is a prerequisite to a course for which he has already received college credit.

If a student is placed in Greek or Latin 304, he will receive credit for 203 (5 hours) and if he is placed in a course that is more advanced than 304, he will receive credit for 203 and 304 (10 hours). No credit will be allowed for the exemption of 201 and 202 in Greek or Latin, but college credit earned in these courses may be used as free electives toward graduation. No student may receive credit for any course which is a prerequisite to a course for which he has already received college credit.

2. SCIENCE-MATHEMATICS 30-50

A. Mathematics and/or Philosophy (10)

For A.B. students: Mathematics 100 and one course from the following: Mathematics 101, 200, 235, or Philosophy 258.

For B.S. students: Mathematics 100-101.

B. Science (20-40)

For A.B. students: (20 hours of which 10 must be with laboratory). A student must follow either option I or option II.

Option I

(a) A double non-laboratory (or laboratory) course from: Botany 121-122 (laboratory) or Biology 101-102 (laboratory) (10)

(b) A double laboratory course from: Chemistry (111-112)** or 121-122 or physics 127-128 or Geology 125-126 (10)

Option II

(a) Two non-laboratory (or laboratory) courses from: Physical Science 101* or Physics 127 (laboratory) and either Geography 104 or Chemistry (111)** or 121 (laboratory) (10)

(b) A double course from Botany 121-122 or Zoology 225-226 (10)

For B.S. students: 40 hours of science or 30 hours of science plus 10 hours of mathematics, as follows:

(a) Biology 101-102 or Zoology 124*** or Botany 121-122 (laboratory) (10)

(b) Chemistry 121 or Geography 104 and one of the following:
Physical Science 101, Physics 127 or Physics 128* (10)

*Physical Science 101 should not be taken if further work in physics is contemplated.

**A.B. students, other than chemistry and pre-med, may take Chemistry 111-112.

***Pre-medical students and those majoring in zoology should should take Biology 101-102.

The student will also take 20 hours (two 10 hour sequences) from any two of the three following groups:

- (c) Biological Science Division: Botany 121-122 or Zoology 225-226 (10)
- (d) Physical Science Division: Chemistry 121-122 or 122-223 or Geology 125-126 or Physics 127-128 (137-138) or 128-229 (138-239) (10)
- (e) Mathematics 253-254 (10)

- 3. FINE ARTS (5-6)
Fine Arts 300, H-397, H-399, or Art 300, Drama 300, Music 300, or Art 317(3) and Music 343(3). This is a requirement for A.B. students and is an elective for B.S. students.

- 4. SOCIAL SCIENCE 35-40
 - A. History 111-112 (10)
 - B. Political Science 101 (5)
 - C. Social Studies (20-25)

For A.B. students: (25 hours)

Five courses from:

- Anthropology 102
- Economics 105
- Geography 101 or 341
- History 251 or 252
- Philosophy 104 or 305
- Psychology 101
- Sociology 105

For B.S. students: (20 hours)

Four of the above courses or three of the above courses plus Fine Arts 300, Art 300, Drama 300, or Music 300. Philosophy 459 may replace 104 or 305.

- 5. MAJOR (All grades must be C or above) 40

The major consists of a minimum of 40 hours. No course can be used to satisfy any part of the major if it has been used to satisfy any of the requirements listed under Items 1-4 above.

These 40 hours must be distributed as follows:

- A. The major subject:
A minimum of 20 hours of senior division courses in one subject. These must be taken after admission to senior division standing and in residence.
- B. The major division:
In addition to the 20 hours listed above, the student must take 20 or more hours either in the major subject or in the division of the major. At least 10 of these hours must be in senior division courses.
The major professor must approve all of the 40 hours in the major.

For the A.B. degree the major may be in any division, but for the B.S. degree the major must be in either the biological or physical science division. By special action of the dean and the major professor a combined divisional major may be authorized.

6. REQUIRED ELECTIVES 15
- None of these can be in any subject which is included in the 40 hours of the major, but they may be taken in subjects that are in the same division as the major subject or subjects.
7. FREE ELECTIVES 14-26
- These will vary as needed to meet (1) a minimum of 195 academic hours, (2) all residence and senior division requirements, and (3) any scholastic requirements, such as replacing excess D grades or raising the academic average. To meet these requirements the number of electives may exceed 20 hours but not over 15 hours of professional credit may be used.
8. TOTAL ACADEMIC HOURS (Minimum) 195
- These 195 hours include basic ROTC and Physical Education 1-2. Not over one-fourth can be in grades below "C" and the average must be "C" or above.
- For the A.B. and B.S. degree with provisions for a teachers' certificate, see page 91.
- The requirement of 195 hours is for the regular A.B. and B.S. degrees. For any modification of these degrees and for all other degrees, it will be necessary to check the curriculum of the particular degree in order to determine the total hours required.
9. RESIDENCE REQUIREMENTS:
- A minimum of 90 quarter hours in the College of Arts and Sciences, see page 34.
10. SENIOR DIVISION REQUIREMENTS for all degrees in the College of Arts and Sciences:
- (a) 60 hours of senior division courses* after reaching senior division standing, and
- (b) 45 hours, after senior division standing, of senior division courses in the College of Arts and Sciences while in residence in the College of Arts and Sciences, and
- (c) 30 hours in senior division courses must be taken in residence during the three quarters' work immediately preceding graduation. If a student takes more than 45 hours during his last three quarters, at least two-

*A student who has satisfied the language requirement for his degree in one foreign language may count the courses taken during his junior and senior years in any other foreign language regardless of course numbers towards his senior division requirements.

thirds of the total must be in senior division courses taken in residence.

Students under one of the combined programs should see the curriculum for that degree concerning residence and senior division requirements.

11. SPECIAL REQUIREMENTS FOR ALL CANDIDATES FOR A DEGREE:

- A. Examinations on the Constitutions.
See page 35. Students transferring for credit for Political Science 101 from institutions outside of the state will be required to pass an examination on the Georgia Constitution.
- B. Sophomore Comprehensive Examination.
This examination is required of all sophomores and also of students who transfer in as juniors or seniors.
- C. Examination on the History of the United States and Georgia.

All students receiving a degree from the University of Georgia are required to pass an examination on the history of the United States and Georgia (given at the beginning of the freshman year) unless credit is presented in (1) History 100 or (2) History 251-252 or (3) History 459 and one other course in American history.

BACHELOR OF ARTS OR BACHELOR OF SCIENCE
*With Provisions for a Professional Certificate for Teaching in
Secondary Schools*

A.B. Advisers: Elizabeth Watkins and Lindsey Rogers
B.S. Advisers: Barney A. Daughtry and William M. Carlton

The requirements for either degree total 200-215 hours, with 165-180 hours to be taken in the College of Arts and Sciences and a minimum of 35 hours to be taken in the College of Education. Students must have their program approved by the Dean of the College of Arts and Sciences and by the Dean of the College of Education by the end of the sophomore year. All students must make application for admission to teacher education as described in the College of Education section.

An academic average of at least 75 is required for admission to this program. Students who fail to maintain this average may be dropped from this curriculum.

REQUIREMENTS

These are the same as for the A.B. and B.S. degree (see pages 87-91) except that in:

- (1) Item 4C.
A.B. students take Psychology 101 and three other courses.
B.S. students take Psychology 101 and two other courses.
- (2) Items 6 and 7.
For both the A.B. and B.S. degrees these items are replaced by Speech 108 and Education 303, 304, 335, 336, 346, 347, and 348.
- (3) Items 8-11 inclusive.
The total number of hours (minimum) 200-215

MAJOR IN ART OR MUSIC OR SPEECH AND DRAMA WITHIN THE BACHELOR OF ARTS DEGREE

Hours

BASIC CURRICULUM: Same as for A.B. Degree, except omit items
3, 5, and 6 110-120

FOR MAJOR IN ART:

This option is designed to provide a broad understanding of art rather than a specialized concentration.

Freshman and Sophomore years—Art 120, 130, 140, 287, 288, 289	24
Junior and senior years—Art History (senior division)	10
Art (Senior division) as approved by major professor	30
Music: Recommended 300, 343, 350 or 358	3-5
Electives as needed to give minimum of 195 hours.	
Fulfillment of items 7-11 inclusive, pages 90, 91.	

FOR MAJOR IN MUSIC:

Freshman year—Music 110 and 387, 388, 389, or 390	6
Sophomore year—Music 122, 123, 124	12
Junior and senior years—Music 134, 135, 136, 310, 5 hours of music history or theory elective, Art 317 or approved art substitute . .	26
Applied music—Music 182, 282, 382, 482.	24
All music majors must participate in a performing organization and pass a comprehensive examination in music before graduation.	
Fulfillment of items 7-11 inclusive, pages 90, 91, and a minimum of	195

FOR MAJOR IN SPEECH AND DRAMA:

Freshman year—Drama 102, Speech 108.	10
Sophomore year—Speech 209, 250, Drama 222, 334	20
Junior and senior years—Speech (senior division)	20
Drama (senior division)	20

All speech-drama majors must participate in laboratory activities required by the department.

Fulfillment of items 7-11 inclusive, pages 90, 91, and a minimum of	195
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BACHELOR OF SCIENCE IN CHEMISTRY

Advisers: G. E. Philbrook, W. H. Waggoner, T. H. Whitehead

The curriculum for this degree offers training in the field of chemistry and its allied sciences for students who desire to enter commercial or government laboratories, to enter the teaching profession, to become associated with chemical industries in a non-technical position, or to pursue graduate work in chemistry in order to enter some field of research or college teaching.

A.C.S. Certification. All students who satisfactorily complete this curriculum are certified by the Department of Chemistry to the American Chemical Society as having completed the undergraduate training recommended by the A.C.S.

REQUIRED COURSES IN FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	Physics 127, 128, 229	15
Chemistry 121-122-223	15	Mathematics 254, 255	10
Mathematics 100-101, 253	15	Chemistry 280, 340, 341, 342	20
Political Science 101	5	Basic ROTC	3
Basic ROTC	3	Physical Education 2	3
Physical Education 1	3		

and sophomore work, in order to continue in the junior year for this degree. An average of C+ must be maintained in both chemistry and other academic subjects in the junior and senior years. No transfer student will be accepted as a candidate for this degree later than the beginning of his junior year. A student who wishes to take this degree should enter the university no later than the beginning of his sophomore year.

REQUIREMENTS IN JUNIOR AND SENIOR YEARS

- (1) English 121-122: Ten hours.
- (2) *German: Through 103.
- (3) Chemistry: 426, 427, 442, 480, 490 a-b-c; 580, and any two of 347, 348, 349, 430, 431, 432 (42-46 hrs.)
- (4) Non-Science Electives: Ten hours**.
- (5) Electives: **A sufficient number of hours (16-25) to make a total of not less than 195.
- (6) Items 9, 10 and 11, pages 90, 91.

BACHELOR OF SCIENCE IN PHYSICS

Adviser: William C. Sears

The curriculum for this degree is designed so as to give the best preparation possible to those students who desire to pursue a career in physics. It provides the necessary foundation for those students who wish to do graduate work toward advanced degrees so that they may enter some field of research or college teaching, for those who wish to seek employment in commercial and governmental laboratories, and for those interested in entering the teaching profession at the high school level.

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	Physics 137 (or 127), 138 (or 128), 239 (or 229)	15
Mathematics 100***, 101, 253, 254	20	Mathematics 255	5
Chemistry 121, 122	10	Foreign Language ¹	5
Political Science 101	5	Electives (Math. 457, 458	

*Students who may wish to take graduate work in chemistry are advised to take some Russian or French since a reading knowledge of two foreign languages is required for a doctorate.
**See item 10, page 90.
***Every effort should be made to exempt Mathematics 100. See page 84.
¹ See Item 1D, page 87 for the B. S. degree.

Basic ROTC	3	recommended)	20
Physical Education	3	Basic ROTC	3
		Physical Education 2	3

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
Physics 332, 333, 372, 404, 420, 465 (or 466 or 467), plus two other 400-level courses ³	35
Mathematics 401 or 459 ³	5
Literature (See Item 1B, Page 87)	10
Biological Science	10
Chemistry	5
Social Science ²	15
Electives (variable but 15 is the minimum)	13-19
Total to give a minimum of	195

Division of Fine Arts

Administered by the College of Arts and Sciences, the Division of Fine Arts encompasses the departments of art, music, and speech and drama. Its purposes is to provide training in appreciation, to help students form standards of taste, to promote culture in the community, and to train performing artists and teachers. The division collaborates with other schools, divisions, and departments, especially those of languages, education, and home economics.

BACHELOR OF FINE ARTS DEGREE

Advisers: Eulala Amos and Charles H. Douglas

Within the Bachelor of Fine Arts Degree, a student may major in art, music, or speech and drama.

ART

The major in art offers nine fields of concentration: Art Education, Art History, Art-Home Economics, Advertising Design and Commercial Art, Ceramics, Crafts, Drawing and Painting, Interior Design, and Sculpture. Students who have majored in art education may be granted a professional certificate by the State Department of Education to teach art, upon recommendation of the Dean of the College of Education. Other opportunities to major in art are provided in the following programs: Bachelor of Arts with a major in art, College of Arts and Sciences; and Bachelor of Science in Education with a major in art, College of Education.

MUSIC:

The B.F.A. major in music offers two fields of concentration: music literature or theory. Other opportunities to major in music are provided in the following programs: Bachelor of Arts with a major in music, concentration in music literature or

² Social Studies: Anthropology 102, Economics 105, Geography 101 or 341; History 111, 112, 251, 252; Philosophy 104, 305 or 459; Psychology 101 and Sociology 105. Fine Arts 300 or Art 300, Drama 300 or Music 300, may be substituted for any social science course.
³ No grade below C in any course in physics or mathematics and the grade average must be B or better in these courses. Items 7-11 inclusive, pages 90, 91.

theory, College of Arts and Sciences; and Bachelor of Music with a major concentration in applied music (performance), composition, church music, or music education, College of Arts and Sciences.

SPEECH AND DRAMA:

The major in speech and drama offers four concentrations: speech and drama, speech-drama education, speech correction, and radio-television drama. Students who major in speech correction may be granted a Professional Teacher certificate upon recommendation of the Dean of the College of Education. Other opportunities to major in speech and drama are provided in the following program: Bachelor of Arts with a major in speech and drama, College of Arts and Sciences.

The basic curricula for the Bachelor of Fine Arts degree are listed by majors and their various concentrations in art, in music, and in speech and drama.

Department of Art

PURPOSE

The objective of the Department of Art is to provide training in the fundamental principles of the creative visual arts. Emphasis is given to active experience with tools and materials. A well-balanced program with its courses in drawing and painting, design, art history, art structure, commercial art, crafts, ceramics, sculpture, art education, interior design, photographic design, and graphics is so integrated that each course functions to advantage in its relations to each of the other courses. From this integration the student is enabled to derive a knowledge of the basic principles underlying all art, and is thereby better equipped to interpret, appreciate, and create works of art.

FACILITIES

The Department of Art occupies the Visual Arts Building, which contains an art gallery, spacious studios, classrooms, lecture rooms and laboratories, many of which are air conditioned. The old Library Building houses the Georgia Museum of Art in which the Eva Underhill Holbrook Memorial paints form the nucleus of a rapidly expanding permanent collection. The General Library contains an extensive collection of books and prints in the field of art.

Bachelor of Fine Arts—Major in Art

Courses are to be chosen in consultation with major professor. No course with a grade D or D plus can be used to satisfy any part of the minimum requirement (40 hours) in a student's major. A minimum of 195 hours total is required for the B.F.A. degree in Art. All students must comply with requirements regarding electives, residence, etc., as set forth earlier in the Arts and Sciences section.

ADVERTISING AND COMMERCIAL ART FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5

Foreign Language (103-104 in Modern Foreign languages; 203-204 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Art 120, 130, 140)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

Hours

Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Art 216, 217, 218, 287, 288, 289)	15-21
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

Hours

Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Art 341 (Watercolor)	5
Art 331 (Painting)	5
Art History (Sr. Div.)	10
Art 320 (Photographic Design)	5
Art 306, 308, 310	15
Art 307, 309, 508	15
Art 504, or 506 or 507	5
Landscape Architecture 255 or Journalism 557	5
Music 358 or 300	5
Electives (Recommended: Art 504, 506, 507, 520, 313, 321)	12-18
Total to give a minimum of	195

ART-ART EDUCATION

FRESHMAN YEAR

Hours

English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign Languages; 203-204 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Art 120, 130, 140)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

Hours

Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10

Fine Arts (Art 216, 217, 218, 287, 288, 289)	15-21
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

	Hours
Science (Physical Sci. 101 or Physics 127 and Geo. 104 or Chemistry 111 or 121)	10
Art History (Sr. Div.)	10
Graphics, Drawing, Painting (from Art 310, 313, 316, 321, 322, 323, 331, 332, 333, 341, 342)	15
Sculpture, Ceramics, Crafts (from Art 370, 371, 372, 260, 361, 362, 250, 350, 351, 352, 320, 513)	15
Art 505	3
Education 303, 304, 335.9, 336.9	20
Education 346.9, 347.9, 348.9	15
Electives (Recommended: Drama 102, Music 358, Philosophy 411)	0-11
Total to give a minimum of	195

ART-ART HISTORY
FRESHMAN YEAR

	Hours
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-204 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Art 120, 130, 140)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	Hours
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Art 216, 217, 218, 287, 288, 289)	15-21
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

	Hours
Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Art History (Sr. Div.)	25
Music (Sr. Div., recommended 358)	5
Electives outside the art dept. (to be approved by major professor)	15*
Electives in art other than art history (min. of 15 hrs. must be in one area)	42-59
Total to give a minimum of	195

*of these elective hours at least 30 must be in the Sr. Div.

ART-HOME ECONOMICS FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-304 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Art 120, 130, 140)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Art 216, 217, 218, 287, 288, 289)	15-21
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Art History (Sr. Div.)	10
Three from Home Economics 105, 120, 175, 293	15
Home Economics (Sr. Div.)	10-20
Electives (to be approved by major professor)	32-54
Total to give a minimum of	195

ART-CERAMICS FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-204 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Art 120, 130, 140)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10

Fine Arts (Art 216, 217, 218, 287, 288, 289)	15-21
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Art History (Sr. Div.)	10
Ceramics	30
Drawing and Painting	15
Crafts or Sculpture	5
Electives (Recommended: interior design, Anthropology 102 and 301, Music 358, sculpture, landscape architecture)	17-29
Total to give a minimum of	195

ART-CRAFTS

FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-204 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Art 120, 130, 140)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201- 202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Art 216, 217, 218, 287, 288, 289)	15-21
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Art 310 (Lettering)	5
Crafts (Sr. Div.)	15
Art 320 (Photographic Design)	5
Ceramics	5
Art History (Sr. Div.)	10
Landscape Architecture 255	5
One from Art 301, 550, 552	5
Music (Recommended: 358)	5
Electives (To be approved by major professor. Recommended: Art 306, 308, 321; ceramics; sculpture; Drama 535; religion; Anthropology 102, 211, 301; Psychology 101; Physics 127, 128; Botany 323)	28-34
Total to give a minimum of	195

ART-DRAWING AND PAINTING FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-204 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Art 120, 130, 140)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202 or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Art 206, 217, 218, 287, 288, 289)	15-21
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Drawing and/or Sculpture	10
Painting and Drawing	25
Art History (Sr. Div.)	10
Music (Recommended 358)	5
Electives (Recommended: Art 371; crafts; Drama 535; Landscape Architecture 255; Psychology 101 and Sociology 105)	27-39
Total to give a minimum of	195

ART-INTERIOR DESIGN FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-304 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Art 120, 130, 140)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10
History 111-112	10

Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Art 216, 217, 218, 287, 288, 289)	15-21
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

	Hours
Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Art 321 or 341	5
Art History (Sr. Div.)	10
Landscape Architecture 255	5
Interior Design 386, 387, 389, 390, 391	25
Crafts or Ceramics	5
Art 320	5
Electives (To be approved by major professor. Recommended: Art history; crafts; ceramics; landscape architecture; home economics; philosophy; psychology; sociology)	22-34
Total to give a minimum of	195

ART-SCULPTURE
FRESHMAN YEAR

	Hours
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-204 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Art 120, 130, 140)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	Hours
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Art 216, 217, 218, 287, 288, 289)	15-21
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

	Hours
Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Sculpture	30
Art History (Sr. Div.)	10
Ceramics	5
Drawing and Painting	10
Electives (To be approved by major professor)	22-34
Total to give a minimum of	195



Department of Music

PURPOSE AND ORGANIZATION

The junior division program for a major in music includes the required academic courses in addition to courses in elementary music theory, harmony, history, and applied music. These courses are designed to give the student a practical knowledge of the theory of music, ear training, harmony, and sight singing. The senior division courses are designed to give the student a broader and more cultural background in music. Applied music courses are offered each year to music majors and also to students of other departments if they can be accommodated.

FACILITIES

Much stress is laid on public performance through music appreciation programs and students recitals. Open to qualified students throughout the campus, the University Chorus and Orchestra present frequent concerts. Other performing groups include the University Band, the Dixie Red Coat Band, and the Men's Glee Club. Voice students are offered training in opera. An outstanding concert series of internationally recognized artists and a Chamber Music Festival in the spring add to the cultural atmosphere of the campus.

Bachelor of Fine Arts in Music

All candidates for the Bachelor of Fine Arts in Music must fulfill the requirements for degree as set forth earlier in the Arts and Sciences section. They must complete a minimum of 195 hours. All music majors must pass a Keyboard Proficiency Test, participate in a performing organization appropriate to the major performance medium, and pass a comprehensive examination.

The B.F.A. in Music may concentrate in either theory or music literature.

MUSIC-MUSIC LITERATURE
FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-204 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Music 110, 183 and 387, 388, 389 or 390)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Music 122, 123, 124 and 283)	15
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
Music 134, 135, 136, 310, 9 hours of music history electives, and 387, 388, 389, or 390	30
Thesis (Recital may be substituted)	22
Applied Music 383, 483	18
Science (Phys. Sci. 101 or Physics 127 and Geo. 104 or Chem. 111 or 121)	10
Art	5
English (One approved Sr. Div. Course)	5
Electives (A sufficient number to bring the total to 195 hours. Recommended: fine arts, English, history, and foreign languages)	3-9
Total to give a minimum of	195

MUSIC-THEORY
FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-304 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Music 110, 183 and 387, 388, 389 or 390)	15
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Literature (Eng. 121-122, French 201-202, German 201-222, Italian 201-202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Music 122, 123, 124 and 283)	21
Basic ROTC	3
Physical Education 2	3

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
Music 134, 135, 136, 310, 9 hours of theory electives, and 387, 388, 389, or 390	30
Thesis (Recital may be substituted)	2
Applied Music 383, 483	18
Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Art	5
English (One approved Sr. Div. Course)	5
Electives as needed	17-23

(A sufficient number of hours to total 195. Recommended: fine arts, English, history, and foreign languages.)

Department of Speech and Drama

PURPOSE

The Department of Speech and Drama provides specialized training in general speech, drama and theatre, radio and television, and speech correction. However, many of the courses are open to students who wish to enrich their knowledge and heighten their appreciation of speech and the arts of the theatre. The purpose of the course is threefold: (1) to give an opportunity for talented students to prepare themselves for professional work in the fields of speech, drama, and theatre, speech correction, and children's theatre; (2) to train leaders for the educational field—teachers, directors, and technicians for schools, colleges, and civic theatres; (3) to make available for students in the University certain courses which will aid them in developing an intelligent interest in the fields of speech and drama.

FACILITIES

THE UNIVERSITY THEATRE. In addition to the various courses, a series of productions is presented each season by the University Theatre, an organization designed for all students who are interested in any phase of dramatic production. The productions are planned in a way to give students, as nearly as possible, the actual experience of producing plays as they are produced in the professional theatre. They are cast and rehearsed by staff directors and the productions are designed and built by students working under the supervision of the instructors in the various courses. No additional fee is charged for membership in this group.

RADIO AND TELEVISION. The department offers a major in radio-television with emphasis on practical training and laboratory experience under faculty supervision. The core curriculum is a combination of liberal arts courses supplemented with basic courses in speech and drama.

Bachelor of Fine Arts in Speech and Drama

All students are required to complete a minimum of 195 hours. In addition, they must fulfill the degree requirements as stated earlier in the Arts and Sciences section.

SPEECH AND DRAMA-SPEECH AND DRAMA
FRESHMAN YEAR

	Hours
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 204-304 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Speech 108 and Drama 102)	10
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	Hours
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10

History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Speech 209, 250 and Drama 222, 334)	20
Basic ROTC	3
Physical Education 2	3

JUNIOR YEAR

	<i>Hours</i>
Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Speech 486 or 487	5
Speech 350	5
Drama 536	5
Electives (Approved major field)	15
Elective	3-4

SENIOR YEAR

	<i>Hours</i>
Drama 530	5
Drama 560	5
Drama 561	5
Speech 591	5
Electives (Approved major field)	10
Electives	20
Total to give a minimum of	195

SPEECH AND DRAMA-SPEECH AND DRAMA EDUCATION
FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 204-304 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Speech 108, 209, Drama 102)	15
Psychology 101	5
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Literature (Eng. 121-122, French 201-202, German 201-212, Italian 201-202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Speech 250, Drama 334)	10
Basic ROTC	3
Physical Education 2	3
Social Studies	5
Education 303	5

JUNIOR YEAR

	<i>Hours</i>
Science (Phys. Sci. 101 or Physics 127 and Geog. 104 or Chem. 111 or 121)	10
Philosophy 258 or Math. 101	5
Speech 310	5
Speech 350	5
Speech 486 or 487	5
Speech 591	5
Drama 222	5
Drama 535	5

SENIOR YEAR

	<i>Hours</i>
Education 304	5
Education 335	5
Education 336	5
Education 346	5
Education 347	5
Education 348	5
Drama 530	5
Drama 560	5
Drama 561	5
Approved electives (Sr. Div.)	10
Total to give a minimum of	195

SPEECH AND DRAMA-SPEECH CORRECTION*
FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-304 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Speech 108, 209)	10
Psychology 101	5
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10
History 111-112	10
Science (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Speech 209)	5
Basic ROTC	3
Physical Education 2	3
Education 303	5

JUNIOR YEAR

	<i>Hours</i>
Speech 446	5
Psychology 490	5
Education 304	5
Education 401	5
Education 538	5

SENIOR YEAR

	<i>Hours</i>
Psychology 423 or Sociology 427	5
Education 346.16	5
Education 347.16	5
Education 348.16	5

*This curriculum leads to a Professional Teacher Certificate.

Speech 310	5	Speech 474	5
Speech 412	5	Speech 476	5
Speech 470	5	Speech 593	5
Speech 471	5	Electives	15-21
		Total to give a minimum of	195

SPEECH AND DRAMA-RADIO AND TELEVISION DRAMA FRESHMAN YEAR

	<i>Hours</i>
English 101-102	10
Political Science 101	5
Foreign Language (103-104 in Modern Foreign languages; 203-304 in Greek or Latin)	10
Mathematics 100	5
Fine Arts (Drama 102, Speech 108)	10
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Literature (Eng. 121-122, French 201-202, German 201-202, Italian 201-202, or Spanish 201-202)	10
History (Bot. 121-122 or Biol. 101-102)	10
Fine Arts (Speech 209, 250 and Drama 222, 334)	20
Basic ROTC	3
Physical Education 2	3

JUNIOR YEAR

	<i>Hours</i>
Science (Phys. Sci. 101 or Physics 127 and Geo. 104 or Chem. 111 or 121)	10
Drama 536	5
Drama 544	5
Drama 545	5
Drama 546	5
Speech 486 or 487	5
Speech 350	5
Approved elective	5

SENIOR YEAR

	<i>Hours</i>
Drama 560	5
Drama 561	5
Drama 530	5
Speech 591	5
Approved Electives (Sr. Div., Recommended: Drama 582, 583, 585)	28-34
Total to give a minimum of	195

DEPARTMENT OF MUSIC

BACHELOR OF MUSIC

Major in Applied Music (Performance) or Composition
 Adviser: Charles H. Douglas

FRESHMAN AND SOPHOMORE YEARS

	Hours		Hours
English 101-102	10	Literature ³	10
Foreign Language 103-104 ¹	10	Science ⁴	5
Political Science 101	5	Music 134, 135, 136	15
Music 110	3	Music 284 ⁵	12
Music 122	2	Music 387, 388, 389, or 390	3
Music 184 ²	12	Basic ROTC	3
Music 387, 388, 389, or 390	3	Physical Education 2	3
Basic ROTC	3		
Physical Education 1	3		

JUNIOR AND SENIOR YEARS

	Hours
Music 123-124	10
Music 384, 484 (including junior and senior recitals) ¹	24
Music 310	3
Theory electives	7
Music history elective(s)	5
Theory or music history elective(s)	5
Ensemble electives	6
Music elective(s)	5
History 111-112	10
Science ⁴	5
Art	5
Electives (minimum)	8-14
Total (minimum hours)	195

For composition majors: A group of original pieces to satisfy requirements of Music 284 and an extended original work in large form in lieu of a senior recital, each to be presented in concert. A minimum of 12 elective credits must be taken in theory.

For all students: The fulfillment of items 9-11 inclusive, pages 90, 91. All bachelor of music students must participate in a performing organization appropriate to the major performance medium.

BACHELOR OF MUSIC

Major in Church in Music

The Music Department offers a major in church music with an applied concentration in organ or voice.

¹ Same as A.B. See 1D, page 87. Majors in voice are permitted to substitute one language (Italian recommended) through 103 and one language (French or German recommended) through 102 for the language requirement.

² Voice majors, instead of Music 184, will register for Music 182 and Music 246 (six quarters). Composition majors will register for Music 182 in an applied field and 6 quarters of Music 241-246 (those using a keyboard instrument as the applied field select 6 hours from 241-245; others must select 6 hours of 246).

³ See Item 1B, page 87.

⁴ 10 hours (5 hours may be taken in junior or senior year) from the following: Mathematics 100-101; Biology 101-102; Botany 121-122; Physical Science 101 and Geography 104; Chemistry 111-112 or 121-122; Physics 127-128; Geology 125-126; Zoology 225-226.

⁵ Music 184 for voice and composition majors.

¹ Music 284 and 384 for voice and composition majors.

The major offers professional training for future church musicians. This is a four-year program and requires special faculty advisement from the beginning of the freshman year. Interested students should contact the Head of the Department of Music for an outline of requirements.

MAJOR IN MUSIC EDUCATION

Adviser: James E. Dooley

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	Literature ²	10
Foreign Language 103-104 ¹	10	Science ³	5
Political Science 101	5	Music 134-135-136	15
Music 110	3	Music 201	1
Music 122	2	Music 282	6
Music 182	6	Music 387, 388, 389, or 390	3
Music 387, 388, 389, or 390	3	5 Hours from Music 241, 242, 243, 244, 245, 246	5
6 Hours from Music 241, 242, 243, 244, 245, 246	6	Basic ROTC	3
Basic ROTC	3	Physical Education 2	3
Physical Education 1	3		

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
Music 123-124	10
4 Hours from Music 241, 242, 243, 244, 245, 246	4
Music 310	3
Music 312, 313	10
Music 324	2
Music 325, 326, or 327	2
Music 361	2
4 Hours from Music 362, 363, 364	4
Music 382, 482 (including senior recital)	10
Music history elective	3
History 111-112	10
Art	5
Education 303, 304, 346, 347, 348	25
Elective (minimum)	3-9
Total (minimum hours)	195

All music education majors must:

1. Pass a comprehensive examination covering ear training, theory, music literature, form, and music methods during the senior year.
2. Pass the Keyboard Proficiency Test before applying for student teaching assignment.

¹ See language requirements for A.B. students. Item 1D, page 87. Music education majors allowed to substitute 10 hours of science or mathematics for foreign language requirement. (See science requirements under bachelor of music degree, page 108.)

² See Item 1B, page 87.

³ One course from the following: Mathematics 100 or 101, Geography 104, Physical Science 101, or approved substitute in science or mathematics.

- 3. Participate in a performing organization appropriate to the major performance medium.
- 4. Fulfill items 9-11 inclusive, pages 90, 91.

Combined Degrees

BACHELOR OF SCIENCE AND DOCTOR
OF MEDICINE

(Combined B.S.-M.D. Program)

Advisers: William T. Moss and John W. Nuttycombe

Most students will find it necessary to have a degree before they gain admittance to either the Medical College of Georgia or to any other medical school and are therefore advised to follow the regular four year program as outlined on pages 87-91 which leads to the A.B. or B.S. degree. However, students of outstanding ability who plan either to enter the Medical College of Georgia or to seek, without a degree, admittance to some other medical school may take the combined B.S.-M.D. program outlined below.

FRESHMAN AND SOPHOMORE YEARS

	Hours		Hours
English 101-102	10	Literature	10
Mathematics 100-101	10	(See Item 1B, page 87)	
French 103 or German 103	5	Economics 105 or Sociology 105	5
Political Science 101	5	Zoology 225-226	10
Chemistry 121-122	10	Physics 127 and 128	10
Zoology 124 or Biology		Chemistry 223	5
101-102	5-10	Psychology 101	5
Basic ROTC	3	Basic ROTC	3
Physical Education 1	3	Physical Education 2	3

*JUNIOR YEAR

	Hours
Chemistry 280, 340, 341	15
Physics 229	5
History 111-112	10
Zoology 355	5
Electives (courses numbered 200 or above in arts and sciences) as needed to meet senior division requirements. Ten hours is minimum	19

(A student will find it difficult to meet the minimum requirements of 150 hours* unless he is prepared to take either French 103 or German 103 upon entrance to the University)**

Three quarters of residence work, including 45 hours, 30 of which must be in courses numbered 200 or above, devoted exclusively to courses in the College of

*See residence rules. General Information Section, Degree Requirements.
**See Item 1D, page 87 for language requirement under regular B.S. degree.

Arts and Sciences, will be required after admission to senior division standing and Item 11, page 91.

SENIOR YEAR

The satisfactory completion of the first year's work at the Medical College of Georgia at Augusta and a total of 195 quarter hours.

BACHELOR OF SCIENCE AND DOCTOR OF
VETERINARY MEDICINE
(Combined B.S.-D.V.M. Program)

Adviser: Sam Kreuz

This program is designed for those students who wish to obtain both the B.S. and D.V.M. degrees. Under this program a student may after the successful completion of his first year in the University of Georgia School of Veterinary Medicine receive the B.S. degree. The curriculum, for the first two years, is the same as that in the B.S.-M.D. program with the exception that Dairy 103, Animal Science 101 and Poultry Science 160 must also be taken; and Botany 121 replaces Zoology 124.

JUNIOR YEAR

	Hours
Chemistry 280, 340, 341, 342	20
Physics 229	5
History 111-112	10
Plant Pathology 358 or Zoology 370	5
Animal Science 358	5
Speech 108	5
Electives (courses numbered 200 or above in arts and sciences as needed to meet senior division requirements)	5-10

Three quarters of residence work, including at least 45 hours, 30 of which must be in courses numbered 200 or above in the College of Arts and Sciences, will be required after admission to senior division standing.

American and Georgia history requirements must be satisfied before admission to School of Veterinary Medicine.

SENIOR YEAR

Satisfactory completion of the first year's work at the School of Veterinary Medicine, University of Georgia, and a total of 195 hours. See Item 11, page 91.

BACHELOR OF SCIENCE AND BACHELOR OF
SCIENCE IN ENGINEERING

The University of Georgia cooperates with the Georgia Institute of Technogogy in giving a five-year program leading to a B.S. degree from the University of Georgia and the B.S. degree in Engineering from the Georgia Institute of Technology. All students interested in this program should see the Dean of the College of Arts and Sciences.

Pre-Professional Programs

BACHELOR OF ARTS DEGREE WITH PRE-PROFESSIONAL MAJOR IN SOCIAL WORK

Adviser: Imogene Dean

The pre-professional concentration in social work is planned to give preparation to students who expect to enter the practice of social work and to lay a sound liberal arts base for professional education in social work.

The requirements for this degree are practically the same as those listed for an A.B. degree, except that the major is increased from 40 to 58 hours and the number of free elective courses is reduced. A maximum of 15 hours of professional credit is allowed. The requirements are:

	Hours
English 101-102	10
Human Biology 101-102	10
Foreign language (see item 1D, page 87)	10
Political Science 101	5
History 111-112	10
Literature (See item 1B, page 87.	10
Mathematics 100 and either Mathematics 101, 200 or 235 or Philosophy 258	10
Laboratory science: A double laboratory course from Chemistry 111-112, or	
121-122, or Physics 127-128, or Geology 125-126	10
Social Studies: Psychology 101, Sociology 105, Economics 105 and two	
other courses. (See item 4C, page 89)	25
Fine Arts 300	5
Classical Culture 301-302 (See item 1C, page 87)	10
Major: (Not to be taken until credit is obtained in Sociology 105, Eco-	
nomics 105, Psychology 101, Political Science 101 and Biology 101-	
102)	
Group 1	43
Psychology 258 or 459	5
Psychology 373	3
Political Science 406	5
Sociology 315, 435, and 470 or 431	15
Home Economics 293 (Sociology 293) and Home Economics	
493 or 495	10
Education 452 or Home Economics 490 (Psychology 490)	5
Group 2	15
Select three courses from any of the following:	
Psychology 423, 459, Sociology 427, 552; Political Science	
468; Education 455, 521, 523, 512; Home Economics	
496 (Education 496)	
Electives, as needed, minimum	10-16
Physical Education	6
Basic ROTC	6
To total a minimum of	195

PRE-SEMINARY PROGRAM

The University of Georgia offers an undergraduate curriculum for students who plan to enter a church-related vocation such as the pastoral ministry, the ministry of religious education in a church, the ministry to college and university students, and the ministry of teaching religion in colleges and universities.

The Bachelor of Arts degree program of the College of Arts and Sciences permits the students to meet the undergraduate requirements of the American Association of Theological Schools, of which all accredited seminaries in the United States are members.

Students interested in entering a theological seminary following graduation from the University should consult with the head of the Department of Philosophy and Religion not later than the beginning of their junior year.

PRE-PHARMACY PROGRAM*

Adviser: Mrs. Lestina Tebo

To be admitted to the professional program in the School of Pharmacy, the student must have completed a minimum of 90 quarter hours of pre-pharmacy courses as specified below, exclusive of basic ROTC and physical education. Students with high academic average, having 90 hours of credit may be admitted with not more than 15 quarter hours of deficiencies in required courses, provided such deficiencies may be completed during the first professional year.

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
Chemistry 121, 122, 223	15	English 121 or 122	5
English 101, 102	10	Biology 101-102	10
Mathematics 100	5	Zoology 226	5
Political Science 102 ³	5	Physics 127	5
Economics 105	5	History ²	5
Elective ¹	5	Mathematics 101	5
Basic ROTC	3	Electives ¹	10
Physical Education 1	3	Basic ROTC	3
		Physical Education 2	3

Upon completion of this program, the student will be eligible to apply for admission to the School of Pharmacy. Application should normally be made to the Dean of the School of Pharmacy during the winter quarter of the sophomore year.

PRE-VETERINARY MEDICINE PROGRAM

Adviser: Sam Kreuz

This two year program does not lead to a degree from the College of Arts and Sciences. It prepares the student for entering the School of Veterinary Medicine. A pre-veterinary program also is available through the College of Agriculture. Refer to the College of Agriculture.

*Does not lead to a degree from College of Arts and Sciences.
¹ Electives should be chosen from the humanities, social sciences, psychology or languages and should not be in science, business or applied courses.
² The History Qualifying Examination will not fulfill the requirement.
³ Passing the Georgia and Federal Constitutional Examinations will not fulfill this requirement.

FRESHMAN AND SOPHOMORE YEARS

	Hours		Hours
English 101-102	10	Speech 108	5
Mathematics 100-101	10	Dairy 103	3
Political Science 101	5	Animal Science 101	3
Chemistry 121-122, 223	15	Poultry Science 160	3
Botany 121	5	Zoology 225-226	10
Basic ROTC	3	Chemistry 340, 341, 342	15
Physical Education 1	3	Physics 127-128	10
		Animal Science 358 and either Zooology 370 or Plant Path- ology 358	10
		Basic ROTC	3
		Physical Education 2	3

BACHELOR OF SCIENCE DEGREE,
MAJOR IN MEDICAL TECHNOLOGY

Adviser: John W. Nuttycombe

The following curriculum for the Bachelor of Science Degree with a major in medical technology is given in cooperation with the Medical College of Georgia. (It is also possible for a student to go into medical technology training with a straight B.S. degree in either the biological or physical sciences.)

The cooperative program consists of 165 hours of work at the University and 30 quarter hours at the Medical College of Georgia.

WORK AT THE UNIVERSITY OF GEORGIA

	Hours
English 101-102, 121-122	20
Political Science 101	5
History 111-112	10
Mathematics 100-101	10
Foreign Languages	5
(See Item 1D, page 87)	
Social Science	20
(4 courses. See Item 4C, page 89)	
Physics (two courses from 127, 278, 229)	10
Chemistry 121, 122, 223, 280, 340, 341	30
Biology 101 102	10
Zoology 225-226	10
One course from the following:	5
(Microbiology 410, Entomology 200 and 376, Zoology 357, 372, 390)	
	Hours
Microbiology 350, 409	10
Electives ^a	20-25
Total	165

^a Electives as needed to give a minimum of 165 hours and to meet senior division requirements.

Three quarters of residence work, including 45 hours in courses numbered 200 or above, devoted exclusively to courses in the College of Arts and Sciences will be required after admission to senior division standing. Before acceptance by the Medical College of Georgia the student must have completed all of his work at the University with a graduating average and he must also have met the requirements of Item 11, page 91.

WORK AT THE MEDICAL COLLEGE OF GEORGIA

The work at the Medical College of Georgia consists of the following courses given over a period of twelve months: medical microbiology, biochemistry, clinical pathology, hematology, and immunology. Clinical work will be done at the Eugene Talmadge Memorial Hospital.

NURSING PROGRAM*

The University of Georgia cooperates with the Medical College of Georgia in offering a 12 quarter (four year) program in nursing. This program consists of three quarters of work in Athens and the remaining nine quarters of work at the Medical College of Georgia in Augusta. Three quarters of academic work are taken each year; summers are free.

A C plus average in each subject are (English, history, chemistry, etc.) is required for admission to the Medical College and this average must be maintained.

For information regarding admission to the School of Nursing, write to the Dean, School of Nursing, Medical College of Georgia, Augusta, Georgia.

Upon completion of the course, the degree of Bachelor of Science in Nursing is given by the Medical College of Georgia.

FRESHMAN YEAR AT THE UNIVERSITY OF GEORGIA

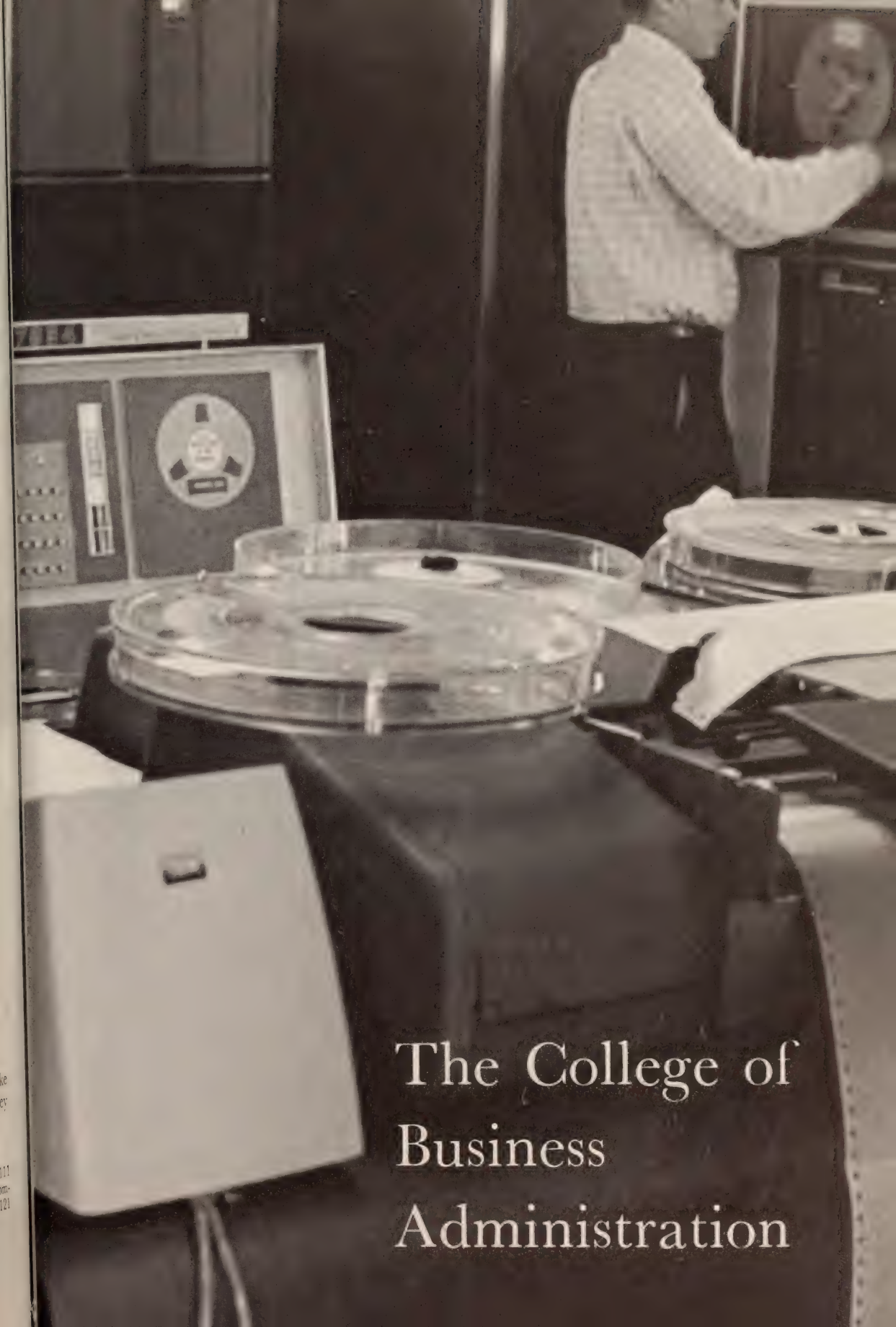
	<i>Hours</i>
English 101-102	10
History 111-112	10
Chemistry 111 or 121 ^a and Chemistry 261	10
Biology 101 ^a and Zoology 212-213	15
Political Science 101 (or required examination)	(5)
Survey of American History 100 (or required examination)	(5)
Psychology 101	5
Physical Education 1-2	3

PRE-DENTISTRY PRE-OPTOMETRY OR PRE-PHYSICAL THERAPY

Students planning to study dentistry, optometry, or physical therapy should take the Pre-Medical Program listed under the combined degrees in this section. They should consult the Dean for specific courses required and further information.

*Does not lead to a degree from the College of Arts and Sciences.

^a Students entering the University of Georgia must complete Biology 101 and Chemistry 111 or 121 during the summer quarter prior to the freshman year of work if they wish to complete the freshman year in one academic year. Students presenting only Chemistry 111 or 121 for admission to Chemistry 261, must have a grade of C+ or better.



The College of
Business
Administration

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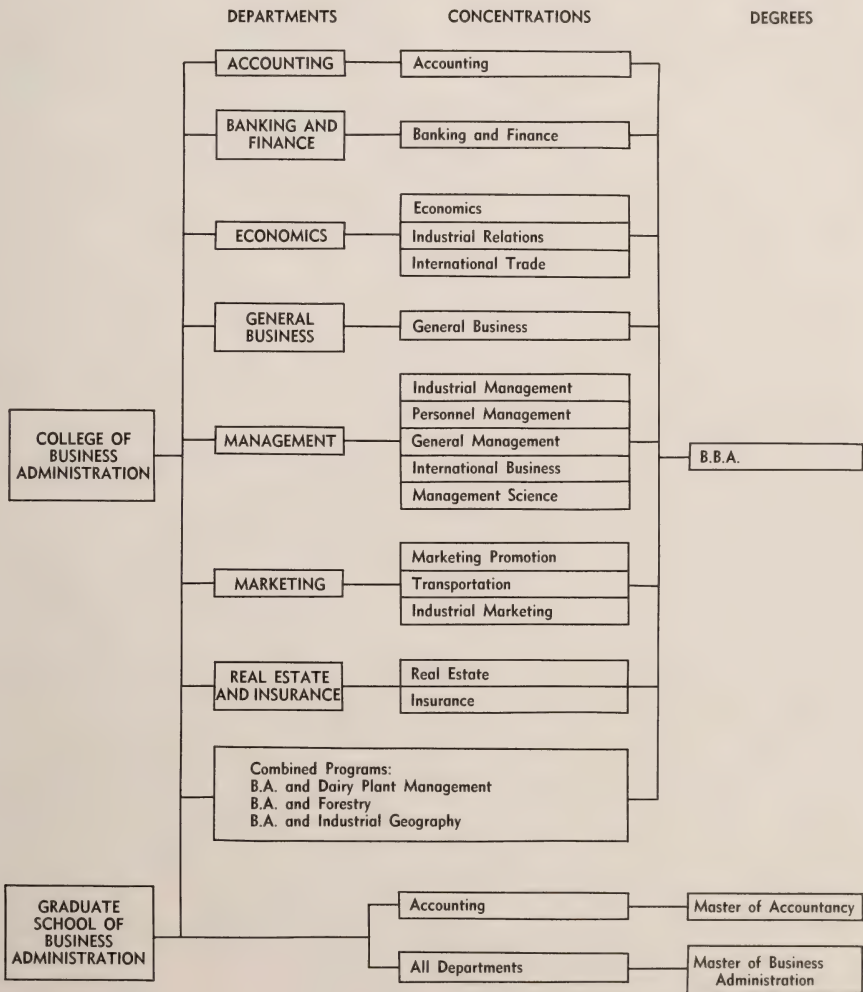
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The College of Business Administration

J. WHITNEY BUNTING, B.S., A.M., M.B.A., Ph.D., Dean

ROBERT TAYLOR SEGREST, B.S.C., M.S.C., Associate Dean.

General Information

ACCREDITATION

The College of Business Administration is a member of The American Association of Collegiate Schools of Business, the national standard-setting organization.

PURPOSE AND ORGANIZATION

The three primary aims of the College of Business Administration are to provide a foundation of general culture, to broaden a student's viewpoint and develop sound thinking, and to supply practical training for students who wish to prepare for business and commercial careers.

Considerable emphasis is placed on producing the well-rounded liberally educated person who can take his place in society as well as in the business world. A minimum of forty percent of the total required courses are in these broad cultural areas.

Business fields covered are accounting, banking and finance, economics, general business, industrial relations, international trade organization management, real estate and insurance.

FACILITIES

The College is housed in the modern five story Commerce Building on north campus and is fully equipped with basic modern machines. International Business Machine Corporation equipment, available for instructional purposes in the laboratories, includes the latest type of punched card data processing. The new Statistics Laboratory is equipped with modern computational equipment used for instruction and research.

DEGREES OFFERED

The College of Business Administration offers the degree of Bachelor of Business Administration.

GRADUATE STUDY

The Graduate School of Business, part of the College of Business Administration, offers the Master of Business Administration degree and the Master of Accountancy degree. An expanded program of short courses and institutes and other post-graduate work of a specifically professional nature are also offered.

The Master of Business Administration is a professional degree for students intending to enter directly into business. It is designed to meet the needs of graduates of liberal arts colleges as well as of professional and technical schools. A program of four quarters of graduate work is necessary for applicants holding the B.B.A. degree

or its equivalent and from four to six quarters for applicants holding degrees in other fields. Neither a thesis nor a reading knowledge of a foreign language is required.

The Master of Accountancy degree is designed to prepare students for professional careers in public accounting or for executive positions in private accounting. It is open to students who hold a B.B.A. degree or its equivalent, with at least 30 quarter hours in accounting subjects, including Accounting 110-111. The program of study contains both professional accountancy courses and courses in general business and economics. It can be completed in four quarters. There is no thesis or foreign language requirement.

The Graduate School of the University offers the degrees of Doctor of Philosophy in Economics and the Doctor of Philosophy in Business Administration; the Master of Arts in Economics and the Master of Arts in Business. These degrees are primarily for persons interested in academic teaching or research programs.

Information concerning these programs of study is available in the Graduate School Bulletin.

HONORS PROGRAM

Coordinator: Richard S. Scott

Effective in September, 1963, the faculty of the College of Business Administration established an Honors Program for its students to be operated coordinately with a similar program in the Franklin College of Arts and Sciences. Under this program a student who has the academic qualifications for honors work may carry a full program of such studies through the major part of the junior year. Honors sections are not provided in major courses, for it is believed that normally close working relations with professors at that level makes such action unnecessary.

Admission of students to the Honors Program is by invitation only. Beginning freshmen are admitted on the basis of high school grades and scores on the College Entrance Examination Board Scholastic Aptitude tests, and on the basis of placement and qualifying examinations administered by the University. For all other students, grades made at the University determine admission to the program. To be admitted to the program and to remain in it, a student should have a cumulative scholastic average of 85, or have a reasonable prospect of attaining such an average.

Honors courses available in the College of Business Administration include:

Principles of Accounting	Accounting H112 and H113
Business Law	Business Administration H380
Principles of Economics	Economics H115
Problems of Economics	Economics H116
Economic Development of the United States	Economics H143
Elementary Economics Statistics	Economics H322
Labor Economics	Economics H396
Money and Banking	Finance H336
Business Finance	Finance H337
Principles of Organization	Management H362
Principles of Marketing	Marketing H369

Special Services and Institutes

BUREAU OF BUSINESS AND ECONOMIC RESEARCH

Director: William B. Keeling

The research and service programs of the College of Business Administration are centered in the Bureau of Business and Economic Research, located in the Commerce-Journalism Building.

The primary purpose of the Bureau is the promotion of business and economic research by faculty and students, with special emphasis given to problems of economic development in Georgia and the Southeast. The Bureau provides a reference collection of business and economic materials, a training program in research techniques, and advice and consultation on individual research problems.

Through Bureau contract research projects, faculty and graduate students are of service to the business community of Georgia. The staff of the Bureau and the supporting faculty serve in cooperation with other University organizations, such as The Institute of Community and Area Development and The Institute of Government, in providing many types of economic development assistance to Georgia communities and areas.

The Bureau publishes a monthly bulletin *GEORGIA BUSINESS*, available without charge to residents of Georgia; the *GEORGIA STATISTICAL ABSTRACT*; the *SOUTHEASTERN RESOURCES HANDBOOK*; and a series of faculty research papers and monographs.

THE INSTITUTE OF BUSINESS AND ECONOMIC RELATIONS

Employee Relations

Director: Ralph E. Balyeat

This Institute was established to carry out research, educational and service programs and activities relating to the efficient utilization of human resources in business and industry. The available staff is interdisciplinary in nature and includes qualified personnel with specializations in Industrial Psychology, Industrial Engineering, Personnel Management and Industrial Management.

Services to business, industry and to the public will normally be either advisory, special programs, or involve the furnishing of requested information on specific areas relating to employment relations.

To facilitate this service, an industrial relations library has been developed and is being maintained to provide the most extensive information source available in the southern area.

The Institute will give assistance to organizations in the planning and staffing of training, educational, or development programs. Such programs may be conducted either in plant or on campus in cooperation with the Center for Continuing Education.

The Institute also is active in developing and promoting better personnel and labor relations policies and practices in the southeast. To this end an advisory board has been appointed to cooperate in developing, promoting and communicating in-

formation to Personnel and Industrial Relations directors. This board consists of the presidents of the various chapters of the American Society for Personnel Administration.

THE CENTER FOR MANAGEMENT SYSTEMS DEVELOPMENT AND ANALYSIS

Director: Fred H. Wise

The Center for Management Systems Development and Analysis conducts programs of instruction, research and service in the application of computer-based management systems for business, commerce, and industry.

The Center was established to bring together a professional staff with highly specialized knowledge of computer applications to management problems.

The basic purposes of the Center are to furnish instruction to graduate and undergraduate students in the latest management applications of computer science, to foster research, and to serve the Georgia business community through seminars, short courses, demonstrations and field consultation.

Degree Requirements

All students should acquaint themselves with the degree requirements applicable to all students of the University as set down in the General Information section of this catalogue.

HOURS

A total of 197 quarter hours is required for the Bachelor of Business Administration degree.

For transfer students who are exempt from Business Administration 101-102 a total of 195 quarter hours is required.

TRANSFER STUDENTS

The specific credit for work done at other institutions which will apply toward the Bachelor of Business Administration degree is determined by the Dean of the College of Business Administration. The amount of such transfer credit shall not in any case exceed that allowed by the Director of Admissions of the University. Allowance of transfer credit by the Director of Admissions does not mean necessarily that all of such credit will be accepted toward a Bachelor of Business Administration degree.

Transfer students admitted for the fall quarter whose credits are received in time for evaluation by the Director of Admissions before the beginning of the quarter, will receive a check-list from the Dean of the College of Business Administration showing completed curriculum requirements and the remaining courses necessary for the Bachelor of Business Administration degree.

Regulations governing transfer students are given in the General Information section.

RESIDENCE

A minimum of 90 quarter hours must be taken in residence at the University. A minimum of 65 quarter hours of senior division courses in the College of Business Administration must be taken in residence. These 65 hours include the required Business Administration core curriculum (35 hours) and the major courses (30 hours).

GRADES

Grades of C or better are required in both the core curriculum courses and the major courses.

REQUIRED CURRICULUM

FRESHMAN AND SOPHOMORE YEARS

Freshman Adviser: Henry S. McDonald

	Hours
Business Administration 101-102	2
English 101-102	10
Mathematics 100 or 101, and 235	10
Laboratory Science	10
Social Studies	15
Humanities	10
Political Science 101	5
Business Administration 109	5
Accounting 110-111	10
Economics 105-106	10
Economics 133 or 134	5
Physical Education 1-2	6
Basic ROTC	6

JUNIOR AND SENIOR YEARS

	Hours
Core Curriculum	35
Major	30
Arts and Sciences Senior Division Electives	10
Electives	20

EXPLANATION OF TOTAL REQUIREMENTS

	Hours
1. Business Administration 101-102, Orientation to Business	2
This course is required of all freshmen. No students other than freshmen may receive credit for this course. Transfer students with sophomore and above standing are exempt from this requirement.	
2. English 101-102, Composition	10
Grade of C or better in English 101 and average grade of C (73) or better required for English 101-102.	
3. Mathematics 100 (Algebra) or 101 (Trigonometry) and 235 (Finite Mathematics)	10

4. Laboratory Science 10
 One of the following double courses:
 Botany 121-122
 Biology 101-102
 Chemistry 111-112 or Chemistry 121-122
 Geography 121-122
 Geology 125-126
 Physics 127-128
 Students may substitute Mathematics 253 and/or 254 for either 5 or 10 hours of laboratory science.
5. Social Studies 15
 Three courses from the following:
 Anthropology 102
 Geography 101
 Psychology 101
 Sociology 105
 Either History 111 or 112
6. Humanities 10
 Two courses from any one of the following:
 English 121-122, Western World Literature
 Foreign Language (two courses in one language)
 Classical Culture
 Philosophy
7. Political Science 101, American Government 5
8. Business Administration 109, Business and Professional Speech 5
9. Accounting 110-111, Principles of Accounting 10
10. Economics 105-106, Economic Principles and Problems 10
11. Economics 133, Economic Development of the United States or Economics 134, Economic Development of Europe 5
12. Physical Education 1-2 6
 (If exempt, must have 5 hours substitute)
13. Military Science 6
 (If exempt, must have 5 hours substitute)
14. Core Curriculum
 Business Administration 370, Business Law 5
 Economics 312, Elementary Economic Statistics 5
 Economics 386, Labor Economics 5
 Finance 326, Money and Banking 5
 Finance 330, Business Finance 5
 Management 351, Principles of Management 5
 Marketing 360, Principles of Marketing 5
15. Major Concentration 30
16. Arts and Sciences Senior Division electives 10
 May be selected from any course numbered 300 or above offered in the College of Arts and Sciences, provided the course prerequisites have been satisfied.

17. Electives 20
- May be selected from any school or college of the University provided the course carries credit of three or more quarter hours. Students who take **Advanced Military or Air Science** will receive elective credit.
18. Major Concentration Requirements:
- (a) No course taken before a student has obtained senior division standing may count as part of his major regardless of the course number and grade.
- (b) Substitutions for courses listed in the major must be approved in writing by the student's major professor or the Dean.

Programs of Study

ACCOUNTING (ACC)

Head: Percy B. Yeargan

Accounting knowledge is fundamental in any business. Internal control can be secured only through intelligent use of business statements and reports. The course in accounting is designed to give an understanding of the principles and practices in the control of business through records and reports, and a knowledge of how to prepare these records and reports. Governmental regulations including taxation further emphasize the necessity of accounting knowledge.

Required courses for all majors in accounting:

	<i>Hours</i>
Accounting 353, Accounting Theory, first course	5
Accounting 354, Accounting Theory, second course	5
Accounting 514, Cost Accounting	5
Accounting 515, Income Taxation	5
Accounting 572, Auditing Theory	5

There are two distinct sequences of accounting courses which may be taken, one leading to work for private concerns and the other to the public accounting field. To those who meet the requirements, it is recommended that a fifth year of study be taken leading to the degree of Master of Accountancy.

Recommended courses for private accounting in addition to the required:

Accounting 215, Automatic Data Processing	5
Accounting 316, Introduction to Business Data Processing Systems	5
Accounting 356, Current Accounting Theory and Research	5
Accounting 516, Advanced Cost Accounting	5
Accounting 521, Data Processing	5
Accounting 579, Functions of the Controller	5

Recommended courses for public accounting in addition to the required:

Accounting 215, Automatic Data Processing	5
Accounting 316 Introduction to Business Data Processing Systems	5
Accounting 356, Current Accounting Theory and Research	5
Accounting 516, Advanced Cost Accounting	5
Accounting 517, CPA Review	5
Accounting 518, Governmental Accounting	5

Accounting 519, Advanced Taxation	5
Accounting 521, Data Processing	5
Accounting 556, Accounting Problems	5
Accounting 573, Auditing Problems	5

BANKING AND FINANCE (FIN)

Head: Robert R. Dince

The major in finance has been designed to provide the student an intimate knowledge of the relative investment merits of the various classes of corporate securities and the nature of our complex banking and financial structure. Modern industry is characterized by the predominance of the corporate form of business enterprise and by the emphasis upon financial management.

The field is divided into five major segments: the financial process, public finance, financial institutions, investments, and the economics of finance. A student by taking courses in finance combined with courses in accounting, economics or management can prepare himself either for a position in a financial institution or a position as a financial executive.

Recommended Courses

	<i>Hours</i>
Finance 430, Corporation Financial Policy	5
Finance 431, Investments	5
Finance 432, Investment Management	5
Finance 434, Public Finance	5
Finance 435, State and Local Public Finance	5
Finance 439, Financial Planning and Control	5
Finance 450, Monetary Policy	5
Finance 451, Commercial Banking	5
Finance 452, The American Financial System	5
Finance 469, National Income Accounting	5
Finance 488, Security Analysis	5
Finance 533, Credit Management	5
Accounting 355, Management Accounting	5
Accounting 449, Analysis of Financial Statements	5
Accounting 515, Income Taxation	5
Economics 436, Business Cycles	5
Economics 481, International Finance: Theory and Policy	5
Management 599, Business Policy	5
Real Estate 510, Real Estate Finance	5
Real Estate 512, Business Real Estate Analysis	5

Students interested in problems of governmental finance can take a specially designed major to fit their interests. Recommended courses for this major in Public Finance are:

- Acc. 518, Governmental Accounting
- Acc. 519, Tax Accounting
- Fin. 406, Intermediate Macro-Economic Theory
- Fin. 434, Public Finance
- Fin. 435, State and Local Public Finance

- Fin. 450, Monetary Policy
- Fin. 459, National Income Accounting and Measurement
- Pol. 443, Public Finance Administration
- Pol. 446, Government Organization and Administrative Theory

ECONOMICS (ECN)

An understanding of the nature of economics, a knowledge of the basis of free-enterprise capitalism, and an awareness of some national economic goals are in order for an individual who lives and works within our dynamic economic system. To attain these objectives, the Department of Economics offers students a major field of study in Economics. The Department also offers a major in Industrial Relations for those students who are primarily interested in the economics of labor-management relations. A major in International Trade also is offered.

An understanding of the economic realities is essential to the effective management of both private and public enterprise. Leaders in these areas must have an appreciation of the significance of general economic developments for the decisions that they make. Only through intelligent planning and coordination based upon an understanding of fundamental economic relationships can our nation adequately fulfill its responsibilities both at home and abroad. The program of training in economics is an outgrowth of this basic need.

The program of study for Business Administration students majoring in economics is as follows:

- (1) Either Economics 405 (Intermediate Micro-Economic Theory) or Economics 406 (Intermediate Macro-Economic Theory) will be taken as part of the major.
- (2) In addition, the student should complete 25 hours from the following list of courses:

	<i>Hours</i>
Economics 405 or Economics 406 (whichever is not taken to satisfy (1) above)	5
Economics 410, Economic Growth and Development	5
Economics 434, Public Finance	5
Economics 436, Business Fluctuations	5
Economics 437, Comparative Economic Systems	5
Economics 444, Government and Business	5
Economics 445, Private Enterprise and Public Policy	5
Economics 450, Monetary Theory	5
Economics 469, National Income Accounting	5
Economics 480, International Trade: Theory and Policy	5
Economics 481, International Finance: Theory and Policy	5
Economics 493, Comparative Labor Movements	5
Economics 495, Economics of Population	5
Economics 497, Economic Evolution of the United States	5
Economics 499, Quantitative Analysis for Economists	5
Economics 577, Public Utilities, Public Regulations, and Public Enterprise	5

INDUSTRIAL RELATIONS

Efficient use of our labor resources is vital to the nation's prosperity and well-being. Efficiency, however, requires an understanding of the numerous relationships between management and worker which extend beyond the technical organization of the process itself. It involves an understanding of personal and group behavior and relationships, an understanding of the development and goals of the employee organizations with which management deals, the collective bargaining process, and the public controls of the worker-management relationship. The industrial relations program is broadly oriented. The increased public concern with the strength and activities of organized employee groups makes many of the issues of industrial relations urgent matters of public policy. Study in this field is considered as part of the equipment of the citizen as well as training for future employment.

Required courses:

	<i>Hours</i>
Economics 489, The Labor Movement	5
Economics 491, Collective Bargaining	5
Economics 493, Comparative Labor Movements	5
Two courses (10 hours) to be selected from:	
Management 585, Personnel Administration	5
Economics 494, Labor Market Analysis	5
Management 595, Administrative Practices	5
Psychology 371, Applied Psychology	5
Sociology 380, Industrial Sociology	5
Sociology 409, Social Change	5

INTERNATIONAL TRADE

In this century the United States has had to develop political and military leadership for a large part of the world. The American economy also has assumed new international dimensions: it has become the world's leading exporter, importer and international investor, lender and donor. To meet the challenges implicit in this situation, training in the principles of international economic relations and acquaintance with the history, mechanisms and institutions of the international economy are needed in the planning and administration of both governmental and industrial activities. The program in international trade is concerned with the development of skills useful to the thinking of personnel in international operations; but it emphasizes the viewpoint of the responsible citizen and is thus liberally oriented toward the training of competent leadership.

Six courses (30 hours) to be selected with the consent of the adviser from:

	<i>Hours</i>
Economics 480, International Trade: Theory and Policy	5
Economics 481, International Finance: Theory and Policy	5
Economics 410, Economic Growth and Development	5
Economics 437, Comparative Economic Systems	5
Economics 493, Comparative Labor Movements	5
Geography 358, Economic Geography	5
Management 482, International Business Policy	5
Marketing 558, International Marketing	5

Political Science 307, Comparative Foreign Governments	5
Political Science 420, International Relations	5
Political Science 422, International Law	5

GENERAL BUSINESS (BBA)

Adviser: Robert T. Segrest

This major is designed for students who wish to obtain a general training in business administration. It is especially appropriate for those who will eventually become owners or managers of small business concerns.

The courses listed below provide useful training for the prospective businessman regardless of the type of business entered. With the approval of the adviser the student may select other courses for this major provided that no more than two courses from any one department may be used.

The student who desires basic training in secretarial skills may apply ten hours of business education toward this major. Such students should also take their free electives in business education.

	<i>Hours</i>
Accounting 355, Management Accounting	5
Accounting 515, Income Taxation	5
Business Administration 576, Business Law, second course	5
Economics 455, Contemporary Economic Problems	5
Economics 496, Managerial Economics	5
Finance 430, Corporate Financial Policy	5
Finance 431, Investments	5
Management 352, Industrial Operations	5
Management 599, Business Policy	5
Marketing 560, Principles of Retailing	5
Marketing 567, Marketing Promotion	5
Real Estate and Insurance 388, Property Insurance	5
Real Estate and Insurance 390, Real Estate Principles	5

MANAGEMENT (MAN)

Head: Howard R. Smith

The essence of business operation is the combining of resources of all kinds into an effective going concern. Because that task is as complex as it is challenging and fascinating, this program of study recognizes that careers in management will normally be fashioned by a long process of development on the job. Training is designed primarily to provide the student with tools which will both facilitate on-the-job development and make certain that this learning will be solidly grounded. The focus of attention will be on principles and on the making of decisions in real-life situations.

Required courses:

	<i>Hours</i>
Management 597, Organization Theory	5
and either	
Management 599, Business Policy	
or	
Management 541, Management Science	5



In addition to these courses required of all management majors, each student will elect a specialization area around which to shape the remainder of his major program. Areas available include Industrial Management, Personnel Management, General Management, International Business and Management Science. The student will work out the details of his program with his adviser from the offerings of the department and such other courses as may seem appropriate for the student's special needs.

Superior students within 55 hours of graduation are encouraged to take Management 340, Business Practice.

ORGANIZATION MANAGEMENT

Adviser: J. Whitney Bunting

The work of organization management lies in the mobilization and coordination of volunteer community efforts by participating business firms and related interested agencies. This curriculum is aimed at preparing young men and women for careers in the wide array of activities associated with Chambers of Commerce and trade associations. This rapidly growing field requires imaginative and creative business leadership, political sensitivity, and basic grounding in the processes of economic development. The broad curriculum designated below is designed to provide the tools that the educator in the field of organization management must understand and use.

Major courses (30 quarter hours) will be selected from among the following:

Business Administration

- Data Processing (exact course to be determined)
- Management 540, Business and Society
- Management 585, Personnel Management
- Management 596, Organizational Communications
- Management 598, Research in Administration
- Marketing 567, Marketing Promotion

Economics

- Economics 410, Economic Growth and Development
- Economics 436, Business Fluctuations
- Economics 444, Private Enterprise and Public Policy
- Economics 489, The Labor Movement
- Economics 490, Labor Legislation
- Economics 491, Collective Bargaining

Senior division electives of 30 quarter hours will be selected from among the following courses:

Political Science

- Political Science 202, American Government
- Political Science 406, State Government
- Political Science 413, Government and Interest Groups
- Political Science 468, City and County Government

Sociology

- Sociology 380, Industrial Sociology
- Sociology 409, Social Change
- Sociology 435, Community Organization

- Psychology*
Psychology 371, Applied Psychology
Psychology 375, Social Psychology
- Journalism*
Journalism 308, Advertising Layout
Journalism 577, Public Relations (Publicity)
- Speech and Drama*
Speech 350, Argumentation and Debate
- Philosophy*
Philosophy 258, Modern Logic

MARKETING (MKT)

Head: Carl T. Eakin

Concentrated study of marketing and distribution is two-fold in purpose: first, it trains students for positions in sales organizations, in transportation companies, in market research, in retailing, and in other fields related to distribution; and, second, it provides appraisal of the market system's effectiveness in meeting the broad demands of social welfare.

Large scale production, regional specialization in production, and the development of metropolitan and urban areas far removed from sources of supply have necessitated a complex marketing machinery. The marketing curriculum provides a broad background of knowledge, attitudes, and skills that are basic to a career in a field which is constantly demanding college graduates for executive positions.

In order to make the marketing major more meaningful, courses should be paralleled by work experience whenever feasible. Superior students within 55 hours of graduation are encouraged to take Business Administration 340, Business Practice.

Required courses for all majors in Marketing:

	Hours
Marketing 465, Marketing Research and Analysis	5
Marketing 567, Marketing Promotion	5
Plus either one of the following:	
Marketing 566, Economics of Marketing	5
Marketing 571, Marketing Management	5

There are four sequences of courses which a student may take, depending upon his particular interests and professional career objectives. In addition to the 15 hours above, the marketing major can elect 15 hours in one of the following sequences, or he can take a general program developed in consultation with his adviser.

MARKETING PROMOTION SEQUENCE

	Hours
Marketing 563, Advertising and Display	5
Marketing 564, Sales Management	5
Marketing 561, Behavioral Theory and Marketing	5

RETAILING SEQUENCE

Marketing 560, Principles of Retailing	5
Marketing 562, Retail Merchandising	5
Marketing 565, Retail Administration and Policy	5

TRANSPORTATION SEQUENCE

Marketing 559, Principles of Transportation	5
Marketing 568, Motor Transportation	5
Marketing 569, Industrial Traffic Management	5

INDUSTRIAL MARKETING SEQUENCE

Marketing 487, Commodity Markets	5
Marketing 570, Wholesaling	5
Marketing 578, Purchasing	5

Other courses offered in the Department are:

Marketing 558, International Marketing	5
Marketing 580, Transportation Regulatory Policy	5

REAL ESTATE AND INSURANCE (REI)

Head:

REAL ESTATE

The real estate industry embraces the development, financing, and marketing of land resources. Businessmen bring these resources into use as developers, as owners or managers of real estate enterprises, as brokers and traders, and as real estate financiers. University trained men are in demand for professional type service in property development, brokerage appraising, property management, mortgage lending and university professors of real estate. An understanding of real estate is essential to any business executive faced with problems of land development, site selection, financing, leasing and land purchase.

The real estate major also provides a person with a strong background for taking the examination for a real estate broker's or salesman's license in Georgia, and provides a good background for further work toward earning professional designations.

	<i>Hours</i>
Finance 431, Investments	5
Management 554, Small Business Management	5
Real Estate and Insurance 381, Risk and Insurance	5
Real Estate and Insurance 385, Casualty Insurance	5
Real Estate and Insurance 388, Property Insurance	5
Real Estate and Insurance 390, Real Estate Principles	5
Real Estate and Insurance 391, Real Estate Brokerage	5
Real Estate and Insurance 392, Real Estate Management	5
Real Estate and Insurance 508, Property Valuation Theory	5
Real Estate and Insurance 509, Property Valuation Problems	5
Real Estate and Insurance 510, Real Estate Finance	5
Real Estate and Insurance 590, Problems in Real Estate	5

INSURANCE

The insurance major is designed to give the student a broad understanding of the place and functions of risk bearing institutions in a private economy, the opportunity for professional advancement in the insurance field, and to give the future business executive some basic principles to guide him in setting up an adequate insurance program. Insurance has assumed the status of a profession and the insurance pro-

gram of study is designed to enable one to achieve professional competency as well as to become a more intelligent purchaser of insurance.

	<i>Hours</i>
Real Estate and Insurance 381, Risk and Insurance	5
Real Estate and Insurance 385, Casualty Insurance	5
Real Estate and Insurance 387, Life Insurance	5
Real Estate and Insurance 388, Property Insurance	5
Real Estate and Insurance 390, Real Estate Principles	5
Real Estate and Insurance 502, Casualty Insurance Problems	5
Real Estate and Insurance 503, Property Insurance Problems	5
Real Estate and Insurance 505, Insurance Programming and Planning	5
Real Estate and Insurance 506, Social Insurance	5
Real Estate and Insurance 507, Insurance Agency Management	5
Real Estate and Insurance 511, Group Insurance and Pensions	5
Real Estate and Insurance 513, Business Risk Management	5

COMBINED MAJORS

ADMINISTRATION AND DAIRY PLANT MANAGEMENT

Adviser: Herbert B. Henderson

In cooperation with the Dairy Science Department, the College of Business Administration offers a major in Dairy Plant Management for those students who wish to combine a technical knowledge of the dairy manufacturing industry with business administration training. This is a four year special program leading to the degree of Bachelor of Business Administration with a choice of either Marketing or Management sequence. Students selecting this concentration should begin the special curriculum during the freshman year.

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>
Business Administration 101-102	2
English 101-102	10
Mathematics 100 or 101 and 235	10
Physical Science 101	5
History 111 or 112	5
Political Science 101	5
Chemistry 111-112	10
English 121-122	10
Business Administration 109	5
Accounting 110-111	10
Economics 105-106	10
Economics 133	5
Electives in Business Administration	5
Physical Education 1-2	6
Basic ROTC	6

JUNIOR AND SENIOR YEARS

	<i>Hours</i>
Bacteriology 350	5
Management 351	5

Business Administration 370	5
Business Administration 576	5
Economics 312	5
Economics 386	5
Finance 326	5
Finance 330	5
Dairy Science 350	5
Dairy Science 389	5
Dairy Science 394	5
Dairy Science 395	5
Dairy Science 396	5
Dairy Science 399	5

MARKETING SEQUENCE

Management 352, Industrial Operations	5
Marketing 560, Principles of Retailing	5
Marketing 563, Advertising and Display	5
Marketing 564, Sales Management	5
Marketing 578, Purchasing	5

MANAGEMENT SEQUENCE

Management 352, Industrial Operations	5
Management 585, Personnel Administration	5
Management 595, Administrative Practices	5
Management 599, Business Policy	5
Marketing 578, Purchasing	5

BUSINESS ADMINISTRATION AND FORESTRY

Adviser: Allyn M. Herrick

In cooperation with the School of Forestry, the College of Business Administration offers a major in Forestry for those students who wish to combine technical knowledge of forestry with business administration training. This is a four year special curriculum leading to the degree of Bachelor of Business Administration, specific content to be worked out for each applicant in terms of his particular needs. Students selecting this concentration should begin their planning for it during their freshman year, as no electives are permitted and requirements of the American Association of Collegiate Schools of Business must be met.

BUSINESS ADMINISTRATION AND INDUSTRIAL GEOGRAPHY

In cooperation with the College of Arts and Sciences, the College of Business Administration offers a major in industrial geography which trains students in the fundamentals of economics, geography, and allied fields upon which the expanding field of area planning is based. Its purpose is to provide the background requisite for careers with city, county, metropolitan and regional planning commissioners; private consultative planning and real property development firms; industries concerned with urban-industrial developmental problems—such as railroads; market analysis consultants; and commercial and governmental mapping agencies. This curriculum also provides a superior basis for graduate work in area planning or economic geography.

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>
Business Administration 101-102	2
English 101-102	10
Mathematics 100 or 101 and 235	10
Political Science 101	5
History 111 or 112	5
Anthropology 102 or Sociology 105	5
Geography 101	5
English 121-122	10
Geography 121-122 (Lab. Science)	10
Economics 105-106	10
Economics 133	5
Business Administration 109	5
Accounting 110-111	10
Physical Education 1-2	6
Basic ROTC	6
Electives, 5 hours must be in Business Administration	10

JUNIOR AND SENIOR YEARS

Business Administration 370	5
Economics 312	5
Economics 386	5
Finance 326	5
Finance 330	5
Management 351	5
Marketing 360	5
Geography 350	5
Geography 358	5
Geography 420	5
Geography 459	5
Geography 460	5
Three courses from the following group:	
Geography 310, 436, 461, 463, 468	15
Four courses from the following group:	
Economic 444, Economics 495, Real Estate 390, Marketing 465, Marketing 559, Marketing 568	20

THE BACHELOR OF ARTS DEGREE WITH
MAJOR IN ECONOMICS

Applicants for the Bachelor of Arts degree upon entering the junior class are required to elect a major division, from which at least eight courses must be taken. One of the major divisions that may thus be elected is the division of social sciences and economics in one of the departments in this division. For A.B. students who desire to major in economics the concentration group in economics is provided. From this group, with the approval of the major professor and the Dean of the College of Arts and Sciences, the major program will be arranged.

The College
of Education

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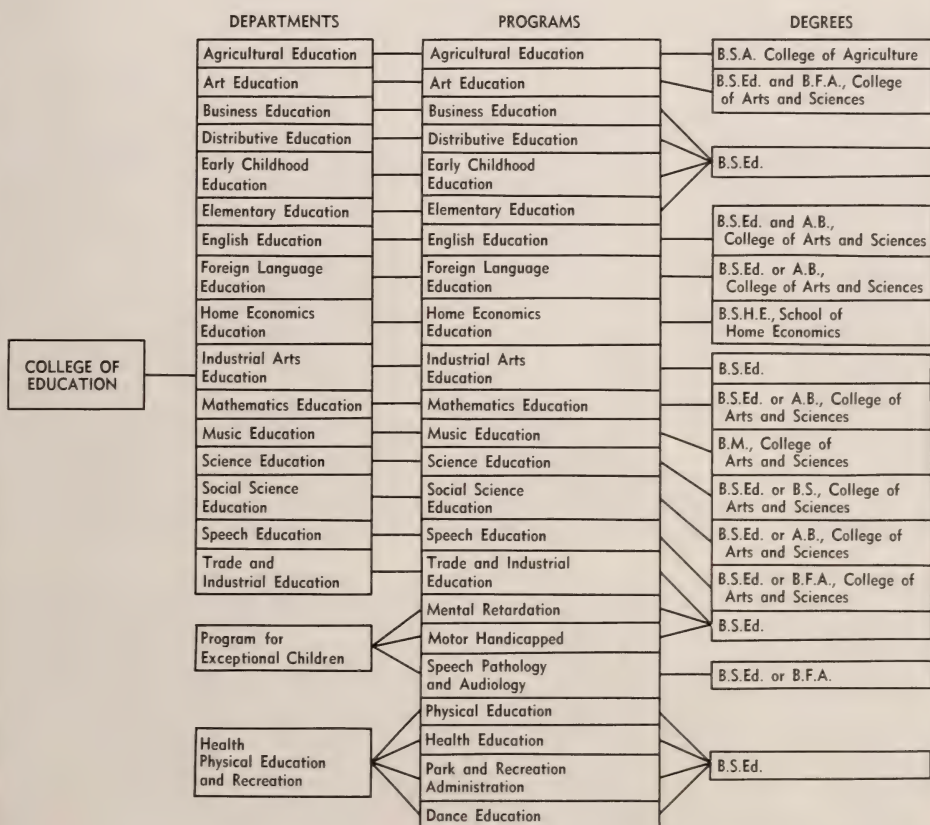
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COLLEGE OF
EDUCATION
UNDERGRADUATE CONCENTRATIONS





The College of Education

JOSEPH ANDERSON WILLIAMS, A.B., M.S., M.Ed., Ed.D., Dean

JIM BUTLER JAMES, B.S., M.A., Ph.D., Assistant to the Dean

General Information

PURPOSE AND ORGANIZATION

The Georgia Peabody College of Education is the division of the University of Georgia which provides and administers all professional courses designed for the preparation of teachers and other educational workers. It has the responsibility of contributing to the continued improvement of education. In its role of educational leadership, the College of Education recruits and selects prospective educational workers, provides pre-service and in-service training programs, conducts research to solve educational problems, and provides field service to public schools and colleges. The University is accredited by the National Council for the Accreditation of Teacher Education.

FACILITIES

The College of Education uses all facilities of the University. The administrative offices and some classrooms are located in Baldwin Hall.

DEGREES OFFERED

The College of Education offers the undergraduate degree Bachelor of Science in Education.

RESEARCH AND DEVELOPMENT CENTER IN EDUCATIONAL STIMULATION

The University of Georgia operates a Research and Development Center jointly financed by the University and the United States Office of Education. The primary function of the center is to study early and continuous intellectual stimulation of children, ages three through twelve.

GRADUATE STUDY

The Graduate School of the University offers the following advanced degrees in education: Master of Arts in Education, Master of Art Education, Master of Education, Master of Music Education, Doctor of Education, and Doctor of Philosophy. Graduate programs for Teacher Certification also are offered. Interested students should refer to the Graduate School Bulletin for specific requirements.

The Graduate Division of the College of Education provides training for teachers, administrators, and other specialized educational workers for early childhood, elementary, secondary, college, and adult education careers. Teacher training is offered in all subject matter fields, with specialization appropriate to the level of teaching—elementary, secondary, and higher education. Administrative specialization

is offered for elementary and secondary principals, school superintendents, school business managers, directors of instruction, and supervisors of instruction. Specialized training is offered in counselor education, rehabilitation counseling, student personnel services in higher education, educational psychology, school psychology, school social work, and reading. Special education programs are offered in four fields—mentally retarded, motor handicapped, emotionally disturbed, and speech audiology and pathology. Vocational education specialists are prepared in industrial arts, business education, distributive education, trade and industrial education, agricultural education, and home economics education. In addition to the program in research design in education, research options are available in all areas of specialization whether the focus is on teaching or administration.

Prospective candidates for advanced degrees may obtain additional information from the Chairman, Division of Graduate Studies, College of Education.

ORGANIZATION OF UNDERGRADUATE PROGRAMS

Undergraduate programs at the University of Georgia prepare teachers and other educational workers in the following fields:

Elementary Education

Art Education

Business Education

Distributive Education

Elementary Education

(Library Education for Elementary School Teachers)

Early Childhood Education

Health, Physical Education, Recreation, and Safety Education

Home Economics Education

Industrial Arts

Teachers of grades 7, 8, and 9

Teachers of the Mentally Retarded

Teachers of Modern Foreign Languages, Elementary and Secondary

Teachers of the Motor Handicapped

Musical Education

Secondary Education in English, foreign language, mathematics, science, social studies, and speech

School Librarian

Speech Correction

Trade and Industrial Education

The entire resources of the University are used in the education of teachers. The College of Education administers all courses in professional education and provides teaching fields in Industrial Arts, Health Education, Physical Education, Recreation, Safety Education, Library Education, and in Special Education. Other courses in teacher preparation programs are taught by other divisions of the University.

- (1) General education, a sequence of courses from a variety of fields, taken primarily in the College of Arts and Sciences in the freshman and sophomore years;
- (2) The teaching field or major, consisting of courses designed for the specific

subject or grade level of prospective teaching, offered in the College of Agriculture, College of Arts and Sciences, College of Business Administration, College of Education, and School of Home Economics;

- (3) Work in professional education, in the College of Education.

MATRICULATION

Most students who prepare for teaching matriculate in the College of Education and pursue one of the programs leading to the degree Bachelor of Science in Education. In three fields, students matriculate in other colleges: College of Arts and Sciences, Bachelor of Music, music education; and School of Home Economics, Bachelor of Science in Home Economics, home economics education. Alternate professional programs lead to a degree from the College of Arts and Science in the following fields: English, foreign language, mathematics, science, social science, Bachelor of Arts or Bachelor of Science; and major in art education, speech and drama education (English concentration), and speech correction, Bachelor of Fine Arts.

Students enrolled in other colleges of the University and seeking certification as a teacher should have their individual programs approved by the College of Education by the beginning of the junior year, and must meet all requirements of the approved professional program.

A distinction is made between matriculation in a division of the University offering teacher education programs and formal admission to a program in teacher education, as described in Admission To Teacher Education.

UNDERGRADUATE PROFESSIONAL SEQUENCE

The basic undergraduate sequence consists of seven courses. The first course is an Introduction to Education, and is the only course offered to freshmen and sophomores. It is a prerequisite for admission to teacher education, application for which is made at the end of the sophomore year.

Educational Psychology is generally taken in the junior year, and is a prerequisite to the remaining five professional courses, taken during the senior year. Courses, in Curriculum and in Methods, are usually taken concurrently in the quarter preceding Student Teaching. A full quarter is devoted to Student Teaching. A September School Practicum is required in a public school at the beginning of the senior year.

The prospective teacher should follow carefully the program in his field of preparation. No deviations should be made without the approval of the student's adviser. The student should particularly note that electives in professional programs are not "free" electives but are "approved electives" related to the teaching field.

STUDENT TEACHING

Supervised observation-participation and student teaching in Cooperating Laboratory Schools are required of candidates for a degree leading to professional certification. An alternate plan is available for persons with one or more years of teaching experience.

Student teaching involves instruction in curriculum and in general and specific

methods under the direction of selected cooperating supervising teachers. High school student teachers usually teach in one teaching field; junior high, in one or two teaching fields; elementary, by grade; and early childhood in nursery, kindergarten or by grade.

Elementary, nursery, kindergarten, and primary teachers are required to spend at least one period of two weeks (September School Practicum) in a public school during late August and early September prior to their student teaching. This familiarizes the student with teaching problems at the beginning of a regular school year.

Special Services

OFFICE OF EDUCATIONAL RESEARCH

The Office of Educational Research, headed by a Coordinator, coordinates basic and applied research and demonstration projects, maintains contact with supporting agencies, and encourages and otherwise facilitates educational research in the College of Education.

BUREAU OF EDUCATIONAL STUDIES AND FIELD SERVICES

The Bureau of Educational Studies and Field Services carries on research in problems of the public schools, the State Department of Education and the University System of Georgia; provides field service personnel to public schools and units of the University System; conducts surveys of schools and school systems; offers training in educational research; publishes materials of interest to educators and the public; and assists local school leaders in conducting educational research.

CLINICS

SPEECH AND HEARING CLINIC. The Speech Correction Area is concerned with training of teachers and the conducting of research in speech correction. The Speech and Hearing Clinic extends its diagnostic and treatment services to all children and adults who have functional or organic problems of oral communication. Particular attention is given to assisting University students. Arrangements for these services are made through the Chairman of Speech Correction.

CLINIC FOR TEACHERS OF VOCATIONAL AGRICULTURE. In cooperation with the State Department of Education and the technical departments of the University, both professional and technical short courses will be offered to groups of employed teachers throughout the state.

READING CLINIC. The Reading Clinic is concerned with the education of teachers of reading and the conduct of research in reading. This clinic offers both diagnostic and corrective service to elementary and high school pupils.

COLLEGE OF EDUCATION COUNSELING SERVICE

A counseling clinic for students enrolled in the College of Education is operated by the College through the office of the Coordinator of Student Personnel Services. Qualified counselors are available to help students with professional and personal problems. A faculty adviser is assigned to each student enrolled in the College to assist him in educational planning.

INSTRUCTION OPPORTUNITIES FOR NON-RESIDENT STUDENTS

To facilitate the professional certification of teachers, the opportunities listed below are offered.

In addition, opportunities for individual training are provided by problem, research, internships, and practicum registration.

OFF-CAMPUS WORKSHOPS. Upon request of county or independent system school officials, the College of Education may conduct off-campus workshops for principals, teachers and other school officials on problems arising in classroom teaching, faculty meetings, and community planning.

ATLANTA AREA TEACHER EDUCATION SERVICE. The University of Georgia, Emory University, Georgia State College, and Atlanta University in cooperation with school systems in the Atlanta area, constitute the Atlanta Area Teacher Education Service. The AATES provides a program of instruction for the teachers in the Atlanta area. Courses are offered on both credit and non-credit basis. Graduate credit up to 20 quarter hours may be earned in this program.

For further information, write to: The Coordinator, AATES, Emory University, Atlanta, Georgia 30322.

SATURDAY CLASSES. The College of Education holds Saturday classes for superintendents, principals, and teachers living within commuting distance of Athens. These graduate and undergraduate classes are not limited to work in education.

CLASS ROOM TEACHER WORK CONFERENCE. This conference provides graduate in-service for teachers carrying five hours credit. Five week-end sessions are held on campus during the academic year. Participants are required to do research and experimentation between sessions and submit a final report. The conference is sponsored by the College of Education, the Center for Continuing Education, and the Department of Classroom Teachers of the Georgia Education Association.

Admission To Teacher Education

Step 1: Enrollment In The College of Education

A new student may enroll in the College of Education, if he so designates. A student within the University must secure permission of the Dean of the College of Education in order to transfer. Enrollment does not constitute admission as a candidate for a professional degree in education.

Step 2: Admission To Teacher Education Program

At the completion of 90 quarter hours college credit, each student who seeks a professional teaching degree must apply for admission into the teacher education program to the Dean of the College of Education. Directions for application may be secured from the dean's office. The University requirements for examinations on the history and constitutions of the United States and Georgia must be met before admission to teacher education.

Step 3: Admission To Enrollment in Curriculum and Methods

The final courses are taken in the order listed, near the completion of the curriculum in teacher education.

Before enrollment in curriculum, the student must have been admitted to teacher education, will have completed the prerequisites in education courses, and essentially all required courses in his teaching field. One quarter before the date of enrollment in curriculum, the student will file application with the chairman of the teaching area in which he wishes to enroll.

Step 4: Admission for student teaching must be made by students through the Coordinator of Professional Laboratory Experiences at least one quarter before they expect to do student teaching.

Students expecting to do student teaching in the fall quarter must apply not later than the beginning of the spring quarter.

To be eligible for student teaching, the prospective teacher must have completed courses in his teaching field and all professional education courses prerequisite to student teaching. He must have a grade of C or above in required education and in teaching field courses.

HONORS PROGRAM

Qualified students are encouraged to participate in both the Junior and Senior Division Honors Programs of the College of Arts and Sciences.

Degree Requirements

The degree requirements for the University applicable to the College of Education are given in the General Information section. Students registered in the College of Education should be familiar with these requirements, which are controlling unless otherwise amended in this section.

RESIDENCE

The minimum residence requirements for the degree Bachelor of Science in Education is 90 quarter hours. Of the 90 quarter hours, at least 45 quarter hours must be in senior division courses and at least 30 quarter hours of senior division courses must be taken in residence during the senior year. For variation in residence requirements for students presenting college work earned before September 1960, see Degree Requirements, General Information.

CORRESPONDENCE AND EXTENSION WORK

Not more than 45 quarter hours by correspondence or extension may be counted toward the degree Bachelor of Science in Education. Work taken at off-campus centers is classified as extension.

GRADES

A candidate for the degree Bachelor of Science in Education must have an average of C (73) in all work attempted and may not have grades below C in more than 45 quarter hours. In addition, he may not count for degree purposes any grade of less than C in the prescribed education and teaching field courses.

Programs of Study for Teacher Certification

(Listed Alphabetically)

Undergraduate teacher-education programs are approved by the State Board of Education and the National Council for the Accreditation of Teacher Education. A person completing any one of these programs may be recommended for a four-year professional certificate. For further information concerning certification in Georgia, see the State Department Education bulletin "Certification of Teachers."

Unless otherwise indicated, the programs outlined lead to the degree of Bachelor of Science in Education with a major in the field specified.

Provisions for professional certification are also available in other programs at the University: In the College of Arts and Sciences, general secondary school teachers, Bachelor of Arts and Bachelor of Science degrees; major in art education, Bachelor of Fine Arts; major in music education, Bachelor of Music; major in speech and drama education (English concentration), and major in speech correction, Bachelor of Fine Arts. In the College of Agriculture, major in agricultural education, Bachelor of Science in Agriculture. In the School of Home Economics, major in home economics education, Bachelor of Science in Home Economics.

AGRICULTURAL EDUCATION

This program leads to the degree Bachelor of Science in Agriculture in the College of Agriculture. Refer to the College of Agriculture.

ART EDUCATION

FRESHMAN AND SOPHOMORE YEARS

	Hours		Hours
English 101-102	10	English 121-122	10
Political Science 101	5	Biology 101-102 or Zoology	
Speech 108	5	101-102	10
Mathematics 100 or		Art 216, 217, 218	9
Philosophy 258	5	Art 287, 288, 289	9
Art 120, 130, 140	15	Basic ROTC	6
Physical Science 101 (or Physics		Physical Education	6
120, Geography 104, Chem-			
istry 111)	5		
Curriculum and Teaching 103 . .	5		
History 111-112	10		

JUNIOR AND SENIOR REQUIREMENTS

	Hours		Hours
Art History	10	Educational Psychology 304 . . .	5
Art 310, 313, 316, 321, 322, 323,		Art Education 335, 336, 346, 7, 8	25
331, 332, 333, 341, 342 . . .	15	Elective (Drama 102, Music 358	
Art 370, 371, 372, 260, 361, 362,		and Phy. 411 recommended)	25
251, 351, 352, 320, 513 . . .	15		
Art 505	3		

BUSINESS EDUCATION

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	English 121-122	10
Speech 108	5	History 111 or 112	5
Political Science 101	5	Psychology 101	5
Zoology 101-102	10	Economics 105-106	10
Mathematics 100	5	Accounting 110-111	10
Curriculum and Teaching	5	Business Education 108	5
Physical Science ^a	5	Basic ROTC	6
		Physical Education	6

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
Educational Psychology	5
Business Education 335, 336	10
Business Education 346, 347, 348	15
Industrial Arts 332, or Fine Arts 300	5
Business Education 300, 301, 302	9
Business Education 303, 304, 305	6
Business Education 306	3
Business Education 507	5
Business Education 310	5
Business Education 311	5
Accounting 315 or Economics 312	5
Business Administration 370	5
Management 351, Marketing 360	10
Restricted Electives	10

DISTRIBUTIVE EDUCATION

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	English 121-122	10
Mathematics 100	5	Psychology 101	5
Zoology 101-102 or		Economics 105-106	10
Botany 121-122	10	Distributive Education 100	5
Political Science 101	5	Accounting 110	5
Speech 108	5	History 111 or 112	5
Curriculum and Teaching 103	5	Basic ROTC	6
		Physical Education	6
		Teaching Field Elective	5

JUNIOR AND SENIOR REQUIREMENTS^b

	<i>Hours</i>
Art 305 or Fine Arts 300	5
Educational Psychology 304	5

^a Chemistry 111 or 121, Geology 125, Geography 104, 121 or 122, Physics 127 or Physical Science 101.
^b A minimum of 500 hours of directed work experience in a distributive, retail, wholesale, or service establishment on a full or part-time basis is required for certification.

Distributive Education 320	5
Distributive Education 335, 336	10
Distributive Education 346, 347, 348	15
Distributive Education 503	5
Marketing 370	5
Marketing 560	5
Marketing 562	5
Marketing 563	5
Marketing 565	5
Marketing 360	5
Economics 386	5
Management 585	5
Electives from College of Business Administration	10

ELEMENTARY EDUCATION

This program leads to a certificate to teach in the elementary schools from the kindergarten through the seventh grade^a.

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	English 121-122	10
Social Science ^b	15	Speech 108	5
Science ^c	10	Geography 101	5
Mathematics 100	5	History 251-252	10
Political Science 101	5	Science ^c	10
Curriculum and Teaching 103	5	Teaching Field Elective	5
		Basic ROTC	6
		Physical Education	6

JUNIOR AND SENIOR REQUIREMENTS^d

	<i>Hours</i>		<i>Hours</i>
Fine Arts 300	5	Elementary Education 345	1
Art 305	5	Reading Education 401	5
Music 302	5	Reading Education 402	5
Health Education 344	3	Mathematics 502	5

^a The program in elementary education consists of a double major—general elementary and a teaching area. The general elementary major consists of Art 305, English Education 300, Reading Education 401, Reading Education 402, Music 302, Mathematics 502, Physical Education 307, and Physical Education 344. The teaching area consists of courses in a subject field, such as English, mathematics, science, social science, and modern foreign languages. The category of teaching field electives totals 20 quarter hours and is to be used to develop proficiency in one or two teaching areas.

^b Ten hours in social science, to be selected from History 111-112, Anthropology 102, Economics 105, Sociology 105, Social Science 104, during freshman-sophomore years.

^c A minimum of 20 hours in science is required as a part of general education. Two options are available. Option I consists of: Zoology 101-102 (non-laboratory) and Chemistry 111-112 or 121-122, Geography 121-122, Geology 125-126, or Physics 127-128 (laboratory). Option II consists of: Botany 121-122 or Zoology 225-226 (laboratory) and Physics 101 and Geography 104 (non-laboratory). A student must follow either Option 1 or Option II, both of which provide for 10 hours in biological science and 10 hours in physical science.

^d Approved September School Practicum required prior to student teaching.

Physical Education 307	5	Curriculum and Teaching 334	5
English Education 300	3	English Education 337	3
Educational Psychology 201	3	Mathematics Education 338	3
Educational Psychology 304	5	Science Education 339	3
Teaching Field Electives	15	Social Studies Education 340	3
		Elementary Education 346,7,8	15

LIBRARY EDUCATION FOR THE ELEMENTARY SCHOOL TEACHER

Library education courses (listed under Courses of Instruction) are open to elementary as well as secondary school teachers. By taking 20 quarter hours in library education, the student may satisfy the requirements for certification as teacher-librarian. With approval of the faculty adviser, these courses may be included among electives in the junior and senior years. Five courses carry graduate credit and, subject to approval of faculty advisers, may be included in programs leading to graduate degrees.

EARLY CHILDHOOD EDUCATION
(Nursery, Kindergarten, Grades 1-3)

FRESHMAN AND SOPHOMORE YEARS

	Hours		Hours
English 101-102	10	English 121-122	10
Social Science ^a	5	Social Science ^a	10
Science ^b	10	Science ^b	10
Mathematics 100	5	History 251-252	10
Political Science 101	5	Educational Psychology 201	3
Speech 108	5	Music 182 ^c	2
Geography 101	5	Basic ROTC	6
Curriculum and Teaching 103	5	Physical Education	6

JUNIOR AND SENIOR REQUIREMENTS^d

	Hours		Hours
Art 305	5	Mathematics Education 501	5
Music 302	5	Home Economics 591	
Health Education 344	3	or	
Speech 593	5	Physical Education 307	5
Fine Arts 300	5	Home Economics 594	5
Psychology 490	5	Reading Education 401	5
English Education 331	3	Early Childhood Education	
Psychology 101	5	335, 336	10
Electives	10	Early Childhood Education	
		346,7,8	15
		Elective	5

^a See footnote (b) Elementary Education.
^b See footnote (c) Elementary Education.
^c A screening test in piano playing may be taken in lieu of Music 182. Approved electives may be substituted.
^d Approved September School Practicum required prior to student teaching.

HEALTH, PHYSICAL EDUCATION, RECREATION, AND SAFETY EDUCATION

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
Biology 101-102	10	English 121 or 122	5
English 101-102	10	Speech 108	5
Electives in General		Chemistry 111 and 112 ^c	10
Education ^a	5-15	History 111	5
Curriculum and Teaching		Electives in General	
103-303	5	Education ^a	5-15
Health Education	3	Physical Education 211	3
Physical Education 180, 181,		Physical Education 280, 281,	
182, 183 ^b (Men only)	9	282, 283	9
Physical Education 1X	3	Physical Education 2x	3
Health Education 171	3	Basic ROTC	6
Recreation 118	3		

JUNIOR AND SENIOR REQUIREMENTS

CONCENTRATION AREAS

A student will receive some training in each of one of the fields, Health Education, Physical Education, and Recreation Education. He must, however, with the approval of his adviser and head of the department, set up a program in one of the concentration areas at the beginning of the junior year or earlier. A student will be certified in his major concentration with the exception of the Recreation Area. The State Department of Education does not issue certification in the area of recreation. If he desires certification in another area he must satisfy the requirements in that area.

I. PHYSICAL EDUCATION

	<i>Hours</i>
Zoology 212 and 213	10
Educational Psychology 304	5
Physical Education 335, 336	10
Physical Education 346,7,8	15
Physical Education 380, 381, 382	9
Physical Education 379, 380, 381,	
382	9
360, 361, 372, 383, 384	29
Electives	20

II. HEALTH EDUCATION

	<i>Hours</i>
Educational Psychology 304	5
Physical Education 335, 336	10
Physical Education 346,7,8	15
Phy. Educ. 307, 360, 361,	
371, 372, 383	28
Zoology 212, 213	10
Microbiology 350	5
Family Development 390 or 293	5
Education 455	5
Electives in related areas	10
Elective	5

^a Select three courses during the freshman and sophomore years from the following: Political Science 101, History 100, Economics 105-106, Sociology 105, Psychology 101, Philosophy 104, Anthropology 102, Geography 101, or a substitute approved by the major professor.

^b Majors in this field are expected to obtain a uniform to be used in activity classes. These should be obtained from the University Book Stores.

^c Concentration area in recreation education 10 hours from the following: chemistry, Ag. chemistry, physical science, botany, anthropology, geography, or geology.

III. PARK AND RECREATION ADMINISTRATION

	<i>Hours</i>
Music, Industrial Arts, Arts, Drama and Crafts	15
Sociology 427 or 435	5
Education 304	5
Health 370	5
Recreation 346, 347, 348	15
Physical Education 307, 311	8
Recreation 203, 384, 385, 386, 387	15
Journalism 537	3
Electives	7
*Option sequence	20
A. Municipal Park and Recreation Management	
B. Camping and Outdoor Recreation	
C. Recreation for the Ill and Handicapped	
D. Voluntary Youth Service Agencies	

IV. SAFETY EDUCATION

A sequence of three courses, described under the designation "Safety Education," leads to supplementary certification in this field. Not more than 5 hours from this sequence may be used in meeting undergraduate degree requirements.

	<i>Hours</i>
SED 575 Safety Education	5
SED 576 Principles of Traffic Safety	5
SED 577 Practices in Driver Education	5

HOME ECONOMICS EDUCATION

This program leads to the degree Bachelor of Science in Home Economics in the School of Home Economics. (See School of Home Economics.)

INDUSTRIAL ARTS

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	English 121-122	10
Political Science 101	5	History 111-112	10
Curriculum and Teaching 103	5	Industrial Arts 150	5
Industrial Arts 120, 122	10	Speech 108	5
Economics 105	5	Mathematics 100	5
Physical Science	10	Electives	15
Psychology 101	5	Basic ROTC	6

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
Educational Psychology 304	5
Industrial Arts Education 335, 336	10
Industrial Arts Education 346, 7, 8	15

*All recreation majors will elect an option sequence of primary interest. Courses within the option will be selected by consultation with the major adviser.

Industrial Arts 328	5
Industrial Arts 310	5
Industrial Arts 305	5
Industrial Arts 330	5
Industrial Arts 320	5
Industrial Arts 300	5
Industrial Arts 332	5
Industrial Arts 327	5
Industrial Arts 511	5
Electives	15

TEACHERS OF GRADES 7, 8, 9

The program for teachers in grades 7, 8, and 9 includes specialization in one or two of the following fields: English, mathematics, science, and social studies. The program qualifies a student for a professional four-year teachers certificate in grades 7, 8, and 9.

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	English 121-122	10
Speech 108	5	History 111 and 112	10
Political Science 101	5	Physical Science ^b	10
Zoology 101-102	10	Social Science ^c	10
Mathematics 100 ^a	5	Basic ROTC	6
Geography 101	5	Physical Education	6
Curriculum and Teaching 103	5	Teaching Field or Approved	
		Electives	5

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
Fine Arts 300	5
Teaching Field (see recommended courses in teaching fields)	30-40
Second Teaching Field (see recommended courses in teaching fields)	0-30
Approved Electives ^d	0-15
Educational Psychology 304 or 305	5
Curriculum and Methods (Sectioned by Teaching Field)	10
Reading Education 401	5
Junior High Student Teaching 346, 7, 8	15

^a Students exempting Mathematics 100 will substitute a course approved by the College of Education adviser.

^b Geography 121-122, Geology 125-126, Chemistry 121-122, or Physics 127-128. Students planning a social science teaching field should take geography. Chem. 111-112 should be taken only if the student plans to take no further courses in chemistry.

^c Anthropology 102, Economics 105, Philosophy 258, Psychology 101, Social Science 104, Sociology 105

^d Electives must be approved by the College of Education adviser and should be carefully selected to strengthen the student's program. Counselor Education 502, Fundamentals of a Guidance Program, and Physical Education 344, Health Education, are recommended.



RECOMMENDED COURSES IN TEACHING FIELDS FOR TEACHERS OF GRADES 7, 8, 9

The student may select either one or two of the teaching fields listed. Requirements shown below are in addition to freshman and sophomore requirements. A minimum grade of C is required in each teaching field course, including freshman and sophomore courses. A student must complete 40 quarter hours if he elects one teaching field, or 30 in each if he selects two.

Ordinarily, teaching field courses should be selected from those listed below; however, the College of Education adviser may approve substitutions.

ENGLISH (30-40 quarter hours)

English 204, English Literature after 1800

English 310, History of the English Language

English 360, Advanced Composition

English 361, The Short Story

English 411, Advanced Grammar

English 422, American Literature after 1865

English 440, Shakespeare: Part I or English 441, Shakespeare: Part II

Speech 310, Survey of Speech Problems

Recommended electives:

Classical Culture 310, English Derivatives from Greek and Latin

English Education 331, Introduction to Children's Literature

Library Education 502, Book Selection and Purchase

MATHEMATICS (30-40 quarter hours)

Mathematics 101, Trigonometry

Mathematics 253*, Analytic Geometry and Calculus

Mathematics 254*, Calculus

Mathematics 225*, Calculus

Mathematics 256*, Calculus

Mathematics 502, Basic Idea of Arithmetic

Mathematics 503, Basic Idea of Algebra and Geometry

Mathematics 510, Mathematics 512, Fundamental Ideas of Algebra,
College Geometry

Mathematics 514, Set Theory for Teachers

Statistics 200, Elementary Statistics or Statistics 351,

Decision Theory

SCIENCE (30-40 quarter hours)

BIOLOGICAL SCIENCE:

Botany 121-122, Elementary Botany

Zoology 225-266, Invertebrate Zoology and Vertebrate Zoology

CHEMISTRY:

Chemistry 121-122, General Chemistry

Chemistry 223, Qualitative Inorganic Analysis

Chemistry 340, 341, 342, Organic Chemistry or Chemistry 261, Organic
Chemistry (Agriculture). Chemistry 261 is a terminal course in organic
chemistry for students not planning to take further work in the subject.

*These should be taken if the student plans to take mathematics at the graduate level.

PHYSICS:

- Physics 127, General Physics—Mechanics
- Physics 128, General Physics—Heat, Light, and Sound
- Physics 229, General Physics—Electricity, Magnetism, and Modern Physics
- Astronomy 291, Descriptive Astronomy

SOCIAL SCIENCE (30-40 quarter hours)

ANTHROPOLOGY:

- Anthropology 102, Man and His Culture
- Anthropology 405, Cultural Anthropology

ECONOMICS:

- Economics 106, Problems of Economics
- Economics 326, Money and Banking
- Economics 405, Intermediate Micro Economic Theory or
- Economics 406, Intermediate Macro Economic Theory
- Economics 437, Comparative Economic Systems

GEOGRAPHY:

- Geography 358, Economic Geography
- Geography 391, Directed Map and Photogrammetric Compilation
(3 hours)
- Geography 442, South America
- Geography 444, Europe and the Mediterranean
- Geography 446, Geography of the Soviet Union
or
Geography 448, Geography of Southeast Asia

HISTORY:

- History 251-252, American History
- History 381-382, Far Eastern Civilization
- History 391-392, Latin American Civilization
- History 459, Georgia History
- History 341-342, English History

POLITICAL SCIENCE:

- Political Science 202, American Government
- Political Science 406, State Government
- Political Science 420, International Relations
or
Political Science 330, European Political Systems

SOCIOLOGY:

- Sociology 105, Introductory Sociology
- Sociology 409, Social Change
- Sociology 427, Personality and Social Structure

TEACHING MENTALLY RETARDED CHILDREN

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	English 121-122	10
Geography 101	5	History 111-112	10

Mathematics 100	5	Physical Sciences	5
Curriculum and Teaching 103	5	Social Science 104, or Economics	
Biological Sciences	10	105, or Philosophy 101 or	
Speech 108	5	Sociology 105, or Anthropol-	
Political Science 101	5	ogy 102	10
Basic ROTC	6	Psychology 101	5
Physical Education 1 (men)	6	Electives	10

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
Educational Psychology 304	5
Exceptional Children 500, 501, 505, 506	20
Reading Education 401	5
Exceptional Children 508	5
Exceptional Children 509, 510, 511	15
Educational Psychology 401 or Psychology 490	5
Educational Psychology 500	5
Psychology 258, 423, 459, or Sociology 427	5
Speech 310	5
Music 302	5
Mathematics 502	5
Physical Education 344	3
Elective	10
Art 305	5
Industrial Arts 332	5

TEACHERS OF MODERN FOREIGN LANGUAGES
IN ELEMENTARY AND SECONDARY SCHOOLS

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	English 121-122	10
Social Science ^a	10	Social Science ^a	10
Mathematics ^c	5	Science ^b	10
Curriculum and Teaching 103	5	Mathematics ^c	5
Foreign Languages ^d	15	Foreign Language ^d	5
Basic ROTC	6	Teaching Field Course	5
Physical Education	6	Educational Psychology 201	3

JUNIOR AND SENIOR YEARS

	<i>Hours</i>		<i>Hours</i>
Teaching Field Courses	25	Teaching Field Courses	10

^a History 111-112, Economics 105, Political Science 101, Anthropology 102, Geography 101, Sociology 105. A total of 20 hours is required.

^b Zoology 101-102, Botany 121-122, Physical Science 101, Physics 127-128, Chemistry 111-112 or 121-122, Geography 121-122, Geography 104, Geology 125-126. It is recommended that two courses in zoology and two courses in a physical science with a lab be taken. A total of 20 hours is required.

^c Mathematics 101, 200, or 502. A total of 10 hours is required.

^d French or Spanish 101,, 102, 103, 104 (or 5 hour sub.) If the student does not need to take the elementary language courses, he may choose other required courses.

Educational Psychology 304	5
Related Courses ^a	10
Approved electives	7

Curriculum and Teaching 335	5
Foreign Language Education 336, 346, 7, 8	20
Approved electives	10

TEACHING HANDICAPPED CHILDREN

FRESHMAN AND SOPHOMORE YEARS

	<i>Hours</i>		<i>Hours</i>
English 101-102	10	English 121-122	10
Geography 101	5	History 111-112	10
Biological Sciences ^b	10	Social Science ^c	10
Mathematics 100	5	Physical Science ^b	5
Curriculum and Teaching 103	5	Psychology 101	5
Speech 108	5	Electives	10
Political Science 101	5	Basic ROTC	6
		Physical Education	6

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
Educational Psychology 304	5
Reading Education 401	5
Educational Psychology 500	5
Educational Psychology 401 or Psychology 490	5
Exceptional Children 508	5
Exceptional Children 500, 501, 515, 516	20
Exceptional Children 517, 518, 519	15
Mathematics 502	5
Speech 310	5
Music 302	5
Psychology 258, 423, 459, or Sociology 427	5
Physical Education 344	3
Art 305	5
Industrial Arts 332	5
Elective	5

MUSIC EDUCATION

This program leads to the Bachelor of Music degree in the Franklin College of Arts and Sciences. Refer to the College of Arts and Sciences.

GENERAL SECONDARY TEACHERS

The programs in general secondary education are designed for prospective teachers of English, foreign language, mathematics, science, or social studies in grades seven through twelve. Requirements and prerequisites in the teaching field should be considered in choosing courses in the freshman and sophomore years. Each prospective

^a Art 305, Music 302, Fine Arts 300.

^b Selections in science must include 10 hours in a laboratory science. Mathematics 100 must precede physical science.

^c Social Science 104, Economics 105, Philosophy 101, Sociology 105, or Anthropology 102.

teacher should select a teaching field and plan his program with his adviser in the College of Education. Completion of a program qualifies a student for a professional four-year teachers certificate in a field.

FRESHMAN AND SOPHOMORE YEARS

	Hours		Hours
English 101-102	10	English 121-122	10
Speech 108	5	History 111-112	10
Political Science 101	5	Physical Science ^b	10
Zoology 101-102 or		Psychology 101	5
Botany 121-122	10	Mathematics 101, 200, or	
Mathematics 100	5	Philosophy 258	5
Curriculum and Teaching 103	5	Elective	5
Social Science ^a	5	Basic ROTC	6
		Physical Education	6

JUNIOR AND SENIOR YEARS

	Hours		Hours
Art 300, Fine Arts 300, or		Curriculum 335	5
Industrial Arts 332	5	Methods by Teaching Field 336	5
Educational Psychology 304	5	Student Teaching 346, 7, 8	15
Teaching Field Courses	30	Teaching Field Courses	15
Teaching field or approved		Approved electives or	
related courses	10	Teaching Field Courses	10

RECOMMENDED COURSES IN TEACHING FIELDS
FOR HIGH SCHOOL TEACHERS

The program in the teaching field consists of a minimum of 40 quarter hours concentrated in one broad field with 15-25 hours in the teaching field or related areas. The courses in the teaching field and related areas must be planned with the student's adviser. Course selections should be made from the following lists, with those courses marked by an asterisk (*) being required or strongly recommended for teachers in this field.

ENGLISH

A minimum of 40 quarter hours must be taken from the teaching field courses listed. Related courses and electives must be in the following areas: English, speech, foreign language, journalism, or classical culture.

A student planning to teach high school English must complete 20 hours or the equivalent in foreign language, taken in high school and college.

ENGLISH:

- *English 203, English Literature to 1800
- English 204, English Literature after 1800

^a One course should be selected from the following: Anthropology 102, Economics 105, Geography 101, Social Science 104, Sociology 105.
^b Two courses should be selected from the following: Chemistry 121-122, Geography 121-122, Geography 104, Geology 125-126, Physical Science 101, Physics 127-128.

- English 305, Lyric Poetry
- *English 311, History of the English Language
- English 360, Advanced Composition
- English 361, The Short Story
- *English 411, Advanced Grammar and Syntax
- *One course from the following:
 - English 414, Early Eighteenth Century Literature
 - English 415, Late Eighteenth Century Literature
 - English 416, Early Romantic Movement
 - English 417, Late Romantic Movement
 - English 442, Early Victorian Literature
 - English 452, Late Victorian Literature
- *English 420, American Literature to 1865
- English 422, American Literature after 1865
- *English 440 or 441, Shakespeare
- Speech 310, Survey of Speech Problems
- Speech 486, Oral Interpretation of Prose and Poetry
- Speech 487, Oral Interpretation of Dramatic Literature

FOREIGN LANGUAGES^a

A minimum of 40 quarter hours must be taken in one language from the teaching field courses listed. Related courses and electives should be taken in the following areas: foreign language, English, classical culture, and history.

FRENCH:

- *French 103 and 104, Intermediate French
- *French 106, Intermediate French Conversation and Composition
- *French 201 and 202, Introduction to the Study of French Literature
- French 433, French Drama of the Twentieth Century
- French 434, French Novel of the Twentieth Century
- *French 556, Advanced French Syntax and Composition
- French 557, French Phonetics
- French 581, Problems of Teaching Romance Languages

SPANISH:

- *Spanish 103 and 104, Intermediate Spanish
- *Spanish 106, Spanish Conversation and Composition
- *Spanish 201 and 202, Introduction to Spanish Literature
- Spanish 306, Advanced Spanish Conversation and Composition
- Spanish 419, The Spanish Novel of the Twentieth Century
- Spanish 420, The Spanish Novel of the Nineteenth Century
- Spanish 421, The Drama of the Golden Age
- Spanish 422, Spanish Prose of the Golden Age
- Spanish 425, Spanish Drama of the Twentieth Century
- *Spanish 526, Advanced Spanish Syntax and Composition
- Spanish 581, Problems of Teaching Romance Languages

LATIN:

- *Latin 201 and 202, Elementary Latin

^a A special program is available for prospective teachers of French or Spanish at both elementary and secondary levels.

- *Latin 203, Intermediate Latin
- *Latin 304, Readings in Latin
- *Latin 305, Livy
- *Latin 306, Horace
- Latin 400, Advanced Reading Course
- Latin 500, Honors Course in Latin
- Classical Culture 302, Rome

MATHEMATICS

Each prospective teacher should take the 45 quarter hours indicated. Mathematics 253, 254, and 255 should be completed by the end of the sophomore year.

- *Mathematics 253, Analytic Geometry and Calculus
- *Mathematics 254 and 255, Calculus
- *Mathematics 256, Calculus
- Mathematics 414, Introduction to Set Theory
- *Mathematics 440, Introduction to Higher Algebra
- *Mathematics 441, Introduction to Higher Algebra
- Mathematics 442, Introduction to Higher Algebra
- Mathematics 451, Mathematical Statistics
- Mathematics 458, Advanced Calculus
- *Mathematics 512, College Geometry
- *Statistics 351, Decision Theory

SCIENCE

In the four-year science program a minimum of 75 quarter hours are required. Botany 121-122 should be chosen rather than Zoology 101-102 during the freshman year and Mathematics 101 in the sophomore year. Sophomore science courses should be selected from the fields of chemistry, physics, and geology. Mathematics 254 and 255 are prerequisite to enrollment in 300-level physics courses.

ASTRONOMY:

- Astronomy 291, Descriptive Astronomy

MICROBIOLOGY:

- Microbiology 350, Introductory Microbiology

BOTANY:

- *Botany 121 and 122, Elementary Botany
- Botany 305, Identification of Flowering Plants
- Botany 306, Identification of Trees and Shrubs
- Botany 323, Elementary Plant Anatomy
- Botany 375, Plant Ecology
- Botany 380, Plant Physiology

CHEMISTRY:

- *Chemistry 121 and 122, General Chemistry
- Chemistry 223, Qualitative Inorganic Analysis
- Chemistry 280, Quantitative Inorganic Analysis
- Chemistry 340, Organic Chemistry (first course)
- Chemistry 341 and 342, Organic Chemistry

Chemistry 390, Elements of Physical Chemistry
Chemistry 421, Advanced Inorganic Chemistry

ENTOMOLOGY:

Entomology 200, Introductory Entomology
Entomology 374, Economic Entomology

GEOGRAPHY:

Geography 122, Introductory Weather and Climate
Geography 310, Conservation of Natural Resources
Geography 401, Advanced Climatology

GEOLOGY:

*Geology 125, Elements of Geology (Physics)
Geology 126, Elements of Geology (Historical)
Geology 321, Introduction to Mineralogy and Crystallography
Geology 323, Petrology

PHYSICS:

*Physics 127, General Physics—Mathematics
*Physics 128, General Physics—Heat, Sound, and Light
*Physics 229, General Physics—Electricity, Magnetism and Modern
Physics 332, Experimental Electricity and Magnetism
Physics 333, Light
Physics 334, Heat and Thermodynamics
Physics 372, Modern Physics
Physics 380, Electronics

ZOOLOGY:

*Zoology 225, Invertebrate Zoology
*Zoology 226, Vertebrate Zoology
Zoology 350, Natural History of Vertebrates
Zoology 353, Ecology
Zoology 355, Embryology
Zoology 356, Comparative Anatomy of Vertebrates
Zoology 370, Genetics
Zoology 381, Ornithology
Zoology 390, General Physiology

SOCIAL STUDIES

The teaching field courses, related courses, and electives should be selected from the following social sciences: economics, geography, history, political science, sociology, and anthropology. The student must take a minimum of 75 quarter hours in the social sciences with at least 35 quarter hours in one of the above social sciences.

ECONOMICS:

Economics 106, Problems of Economics
Economics 312, Elementary Economic Statistics
Economics 326, Money and Banking
Economics 406, Intermediate Macro-Economic Theory
Economics 437, Comparative Economic Systems
Economics 444, Government and Business

GEOGRAPHY:

- *Geography 101, World Human Geography
- Geography 341, Problems in Political Geography
- Geography 350, Cartography and Graphics
- Geography 358, Economic Geography
- Geography 436, Geography of the South
- Geography 441, Caribbean America
- Geography 442, South America
- Geography 444, Europe and the Mediterranean
- Geography 448, Geography of Southeast Asia
- Geography 459, North American Urban Geography
- Geography 460, North American Industrial Geography
- Geography 461, North American Agricultural Geography

HISTORY:

- *History 111-112, Western Civilization
- History 251-252, American History
- History 341-342, English History
- History 358, Survey of American Diplomacy
- History 372, Russia and East Central Europe Since 1699
- History 381-382, Far Eastern Civilization
- History 391-392, Latin American Civilization
- History 406, American Social and Intellectual History of the Colonial and Formative Periods
- History 407, American Cultural History Since the Mid-Nineteenth Century
- History 430, The Age of World War I
- History 431, The Age of World War II and the Cold War
- History 456, Recent American History, 1877-1900
- History 459, History of Georgia
- History 496, Recent American History 1900 to 1950

POLITICAL SCIENCE:

- *Political Science 101, American Government
- Political Science 202, American Government
- Political Science 330, European Political Systems
- Political Science 406, State Government
- Political Science 409, American Political Thought since 1800
- Political Science 410, American Political Parties
- Political Science 420, International Relations
- Political Science 481, Political Institutions
- Political Science 483, American Constitutional Law
- Political Science 486, Political Philosophies of Recent Times

SOCIOLOGY AND ANTHROPOLOGY:

- Anthropology 102, Man and His Culture
- Anthropology 310, Introductory Ethnology
- Anthropology 400, Early Economic Systems
- *Sociology 105, Introductory Sociology
- Sociology 260, Contemporary Social Problems
- Sociology 409, Social Change

Sociology 422, Development of Sociological Theory
 Sociology 427, Personality and Social Structure
 Sociology 431, Rural Social Systems
 Sociology 433, Population Theory and Problems
 Sociology 435, The Community

SPEECH

A minimum of 40 quarter hours must be taken from the teaching courses listed below including the required courses marked by an asterisk (*). Related courses and electives must be in the following areas: drama, English, speech, foreign language, journalism, or classical culture. A student planning to teach high school speech must complete 20 hours or the equivalent in foreign language, taken in high school and college. Each student is expected to participate in speech laboratory activities for 5 quarters.

SPEECH:

*Speech 209, Phonetics
 Speech 250, Public Speaking
 *Speech 310, Survey of Speech Problems
 *Speech 350, Argumentation and Debate
 Speech 456, Group Discussion and Conference Leadership
 *Speech 486, Oral Interpretation of Prose and Poetry
 or
 Speech 487, Oral Interpretation of Dramatic Literature
 Speech 591, Teaching of Speech

DRAMA:

Drama 102, Acting
 Drama 203, Advanced Acting
 *Drama 222, Survey of Theatre History
 *Drama 334, Scene Construction and Painting
 Drama 429, Play Analysis
 Drama 530, Play Production for High School Teachers
 Drama 535, Scene Design
 Drama 536, Stage Lighting
 Drama 544, Radio and Television Acting
 Drama 560, Play Directing
 Drama 561, Play Directing Laboratory

ENGLISH:

English 203, English Literature to 1800
 English 311, History of the English Language
 English 411, Advanced Grammar and Syntax
 English 420, American Literature to 1865
 English 440 or 441, Shakespeare

SCHOOL LIBRARIAN

Undergraduate and graduate programs are available in Library Education. At the undergraduate level, a sequence of four or five courses, comparable to a second teaching field, leads to certification as a teacher-librarian; at the graduate level, there is a program leading to a Master of Education with a major in library education

which prepares librarians for full-time service in school and public libraries. Candidates for a master's degree in library education who have not qualified for the teacher-librarian certificate must earn 45 quarter hours in library education, 15 hours of which must be in Library Education 300, 301, and 302. The under-graduate courses, however, are not prerequisite to the graduate courses. The basic courses are offered at least once during a school term and summer. None are given by correspondence.

SPEECH CORRECTION

FRESHMAN AND SOPHOMORE YEARS

	Hours		Hours
English 101-102	10	History 111-112	10
Speech 108	5	English 121-122	10
Political Science 101	5	Social Science 104 or Economics	
Zoology 101-102	10	105, or Philosophy 104, or So-	
Mathematics 100	5	ciology 105, or Anthropology	
Curriculum and Teaching 103	5	102	10
Physical Science ^a	5	Psychology 101	5
		Speech 250	5
		Basic ROTC	6
		Physical Education	6

JUNIOR AND SENIOR REQUIREMENTS

	Hours
Educational Psychology 304	5
Speech Pathology and Audiology 515, 516, 517	15
Speech 209, 310, 412, 466, 470, 471	30
Reading Education 401	5
Exceptional Children 500	5
Speech or Speech Pathology 474, 476	10
Speech Pathology and Audiology 538	5
Psychology 258, 423, 459 or Sociology 427	5
Psychology 490 or Educational Psychology 401	5
Electives	10

TRADE AND INDUSTRIAL EDUCATION

This program leads to professional certification as coordinators of Diversified Co-operative Training and teachers of trade and industrial subjects.

Before a graduate is recommended for a professional certificate in this field, the applicant must furnish evidence of work experience in amount and kind which will satisfy provisions of the Georgia State Plan for Vocational Education.

FRESHMAN AND SOPHOMORE YEARS

	Hours		Hours
English 101, 102	10	English 121-122	10
Agricultural Engineering 104-105	4	Psychology 101	5
Chemistry 111-112 or 121-122	10	Economics 105-106	10

^a 5 hours from Physics 101, Chemistry 111 or 121, Geography 104, or Physics 120.

Political Science 101	5	History 111-112	10
Curriculum and Teaching 103	5	Speech 108	5
Mathematics 100	5	Social Science 104	5
Physics 120	5	Electives	5
Elective	2	Basic ROTC	6
		Physical Education	6

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
Educational Psychology 304	5
Trade and Industrial Education 335, 336, 346, 347, 348, 349	28
Business Administration 351	5
Business Administration 352	5
Business Administration 583	5
Economics 312	5
Economics 385	5
Industrial Arts 326	5
Industrial Arts 340	5
Electives	24

The
George Foster Peabody
School of Forestry

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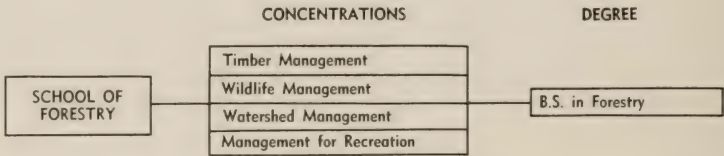
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The George Foster Peabody School of Forestry

ALLYN MARSH HERRICK, B.S., M.F., Ph.D., Dean

General Information

The George Foster Peabody School of Forestry, established in 1906 through the generosity of Mr. Peabody, is the oldest existing forestry school in the South. It is accredited by the Society of American Foresters. The school is ideally situated for its role as a regional school, accessible to residents of the region and to the three major forest regions of the Southeastern United States: Mountain, Piedmont, and Coastal Plain.

PURPOSE

Just as an industrial America is dependent upon wood, water, wildlife, and forage for her economic well-being, her citizens also rely on forests for the satisfaction of outdoor recreational needs and related amenity values. Effectively managed forests assure that these forest resources will not be rationed. Forest resource managers are engaged in the task of providing for the seemingly unquenchable needs of an ever-increasing population from a limited and shrinking land base.

The objective of the School of Forestry is to equip future resource managers with a broad background in the biological, physical, and social sciences. Besides broadening the learning process of forest resource managers, the School is charged with deepening the academic channels of technically-oriented students. These are the future forest scientists who will unlock doors to new knowledge and utility through basic and applied research.

In the past few decades forestry has come to mean more than just timber or wood products. It involves the management of forest lands for the protection, economic production and utilization of all the goods and services the forest can provide, such as game and fish, water, forage, and outdoor recreation. Among the many career opportunities are: forest managers; wildlife specialists; wood technologists; teachers; general conservationists; lumber, paper and related industrialists; public servants in federal, state and local agencies; research scientists; private consultants; merchandisers. In this age of specialization, of particular value are persons trained in dual fields—law and forestry, business and forestry, journalism and forestry, or other combined programs.

CAREER OPPORTUNITIES

The Forestry curriculum represents a minimum core of general and professional course work required of all undergraduate students. Beyond this core there is ample opportunity for concentration in the management of any of the forest resources: timber, wildlife, range, water or recreation. Through careful choice of elective courses, a student may concentrate on a certain phase of land management or he may prepare himself for post-graduate work in some specialized scientific or professional field.

A student may choose to use the ample electives in the forestry program to obtain concentrations in business administration, journalism, or certain departments in the College of Arts and Sciences. With this basis, students often continue on to a degree in their chosen field of concentration in addition to the Bachelor of Science in Forestry degree.

FACILITIES

The modern, three-story Forestry Building houses classrooms, laboratories, a reading room, an auditorium and offices. Construction of a new unit for administrative offices and a four-story building for research and graduate work should be complete for the fall quarter 1967.

Ample surveying, mapping, cruising, sivicultural, forestry protection and other equipment is owned by the school. Calculating machines and photo-interpretation devices are used regularly, and the Computer Center provides the facilities of high speed ultra-modern electronic equipment.

Five greenhouses and a dry kiln are located close to the school. At Whitehall Forest, five miles away, are two tree nurseries, a genetics and tree improvement complex, a wildlife-fisheries-pesticides laboratory, tree physiology laboratories, and an experimental watershed. Plans for future developments at Whitehall include a field laboratory for research in forest hydrology and plant-soil-water relations, and a large building for work in primary forest utilization.

The forest properties owned by the University are managed by the School of Forestry. The Oconee Forest, 120 acres of typical Piedmont forest area, is used for teaching and research. Whitehall Forest, composed of some 750 acres, is committed to research work in all of the forest resources and includes the G. Norman Bishop Arboretum.

The Watson Springs Forest, given by Colonel J. D. Watson, consists of more than 600 acres located 25 miles from Athens. It is devoted to experimental hardwood plantings, outplantings of control-bred trees, teaching and research in silviculture and management.

The Hardman Memorial Park, named after the late Governor Hardman, is a 460 acre tract in Jackson County, 12 miles from Athens, used as a field laboratory in forest management and for research and demonstration in silviculture.

A new Forestry Sciences Laboratory located on campus houses a resident staff of scientists employed by the U. S. Forest Service Southeastern Forest Experiment Station. Some are associate members of the University faculty. The laboratory is an integral part of the school's teaching and research programs.

A Cooperative Fishery Unit of the U. S. Bureau of Sport Fisheries and Wildlife is headquartered in the School of Forestry. The unit conducts research and provides instructional services in wildlife management work.

The Georgia Forest Research Council supports several research workers on forestry-related projects at the University. Cooperation among the school, the Research Council, the Georgia Forestry Commission, the Georgia Game and Fish Commission, the U. S. Forest Service, and the U. S. Fish and Wildlife Service is exemplary.

DEGREES OFFERED

The School of Forestry offers the undergraduate degree of Bachelor of Science in Forestry.

GRADUATE STUDY

Through the Graduate School of the University, the following are offered: the degrees of Master of Science and Master of Forestry; the Doctor of Philosophy degree in silviculture or forest management or in the sciences related to forestry. See the Graduate School Bulletin for further information.

FIELD WORK

In addition to field laboratories in connection with other courses in the curriculum, one complete quarter in the junior year is devoted exclusively to specialized field training on nearby campus properties and extended trips to public and private forest management operations and forest product utilization enterprises within the region. Transportation for trips is provided, but living expenses of approximately \$60 must be paid by the student.

ENTERING THE SCHOOL OF FORESTRY

Students who plan to major in forestry are advised to stress English, mathematics, and the natural and social sciences in high school.

Students should enter the School of Forestry at the beginning of the freshman year if possible. Those who plan to transfer into the school should note carefully the subjects which are prerequisite to the junior year. It is desirable to transfer to the school no later than the beginning of the fifth quarter in order to complete degree requirements without loss of time.

Degree Requirements

The degree requirements for the University applicable to the School of Forestry are given in the General Information section of this catalog. Students enrolled in the School of Forestry should be thoroughly familiar with these requirements, which are controlling unless otherwise amended in this section.

HOURS

A total of 210 quarter hours credit is required for graduation.

SPECIAL SCHOLASTIC REQUIREMENTS

1. Any student already enrolled in or endeavoring to transfer into the School of Forestry who fails to earn a minimum passing score on the Mathematics Test of the Sophomore Comprehensive Examination will not be permitted to register for additional professional forestry courses until he has satisfactorily completed further formal course work in the Department of Mathematics.
2. Early in their junior year, all students will be examined for English proficiency and, if found to be deficient, will be required to take and pass English 101 with a grade of C or better, even though credit for this course may have previously been received.



Bachelor of Science in Forestry

REQUIRED CURRICULUM

FRESHMAN YEAR

	<i>Hours</i>
Botany 121-122	10
Chemistry 121-122	10
English 101-102	10
Forestry 191-192-193 (Orientation)	3
Math 100-101 (Algebra and Trigonometry)	10
Political Science 101	5
Basic ROTC	3
Physical Education 1	3

SOPHOMORE YEAR

	<i>Hours</i>
Ag. Engineering 210 (Surveying)	5
Agronomy 210 (Soils)	5
Forestry 201-202 (Dendrology)	6
Forestry 203 (Forest Ecology)	3
Geology 125 (Physical)	5
Physics 127 (Mechanics)	5
Speech 108 (Fundamentals of Speech)	5
Statistics 200	5
Elective**	5
Basic ROTC	3
Physical Education 2	3

JUNIOR YEAR

	<i>Hours</i>
Ag. Economics 310 (Applied Economics of Ag.)	5
Forestry 321 (Wood Anatomy) . .	3
Resource Management: Forestry 351 (Watershed)	2
Forestry 355 (Recreation)	2
Forestry 361 (Game)	3
Forest Protection: Forestry 382 (Entomology)	5
Forestry 383 (Pathology)	3
Forestry 384 (Fire)	3
Forestry 301 (Silvicultural Practices)	5*
Forestry 344 (Forest Measurements)	5*
Forestry 395 (Forest Mgt. and Util.)	5*
Resources: (Mgt. and Util.) . . .	5*
Electives**	11

SENIOR YEAR

	<i>Hours</i>
Forestry 525 (Harvesting Forest Products)	2
Forestry 527 (Forest Products) . .	2
Timber Management: Forestry 541 (Foundations)	5
Forestry 542 (Finance)	3
Forestry 547 (Mensuration)	4
Forestry 572 (Economics of Forestry)	3
Forestry 591 (Forest Administration)	3
Forestry 595 (Informational Methods in Forestry)	3
Geography 420 (Photo- grammetry)	5
Electives**	24

*These courses must be scheduled concurrently.

**Electives transferred to the University of Georgia used in satisfying forestry degree requirements must be approved by the Dean of the School of Forestry.

FIELDS OF CONCENTRATION

The following courses are recommended electives for students wishing to concentrate in a given field of resource management.

TIMBER MANAGEMENT

	<i>Hours</i>
Botany 380 (Plant Physiology)	5
Forestry 421 (Physical Prop. of Wood)	2
Forestry 449 (Analytic Meth. in For. Mgt.)	3
Forestry 507 (Regional Siviculture)	3
Forestry 548 (Timber Evaluation)	2
Forestry 573 (Forestry Production Economics)	2
Forestry 592 (Operational Probs. in For. Mgt.)	5

WILDLIFE MANAGEMENT

Botany 205 (Ident. of Flowering Plants)	5
Forestry 362 (Forest Range Management)	3
Forestry 561 (Wildlife Mgt. Techniques)	3
Forestry 562 (Adv. Prin. of Wildlife Mgt.)	5
Forestry 566 (Mgt. of the Fishery Resource)	5
Zoology 226 (Vertebrate Zoology)	5
Zoology 350 (Nat. Hist. of the Vertebrates)	5
Zoology 353 (Ecology)	5

WATERSHED MANAGEMENT

Agricultural Economics 364 (Land Economics)	5
Agricultural Economics 480 (Water Resources Economics)	5
Forestry 404 (Watershed Hydrology)	5
Geography 122 (Introductory Weather and Climate)	5
Geology 322 (Structural Geology)	5
Mathematics 252 (Analytic Geometry and Calculus)	5
Physics 128 (Heat, Sound and Light)	5

MANAGEMENT FOR RECREATION

Botany 205 (Ident. of Flowering Plants)	5
Forestry 556 (For. Mgt. for Recreation)	3
Forestry 557 (For. Recreation Area Devel.)	5
Forestry 592 (Operational Probs. in For. Mgt.)	5
Journalism 377 (Photojournalism)	3
Psychology 101 (Elementary Psychology)	5
Sociology 105 (Introductory Sociology)	5

The School of
Home Economics

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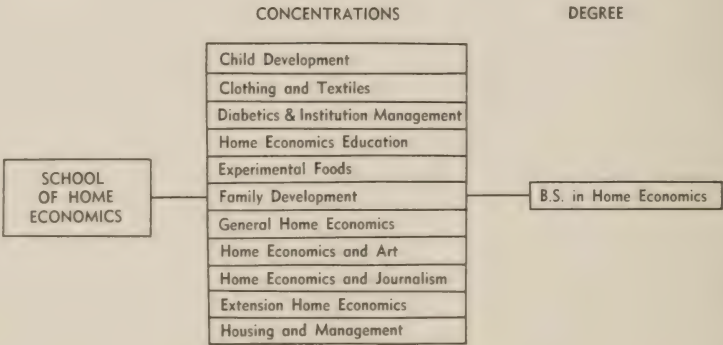
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The School of Home Economics

MARY SPEIRS, A.B., M.A., Ph.D., Dean

General Information

PURPOSE AND ORGANIZATION

The School of Home Economics offers training for a number of professional careers and, in addition, prepares students for effective family life. The curricula provide well-rounded programs of general, scientific, and technical education.

About one half of the requirements for the home economics degree are planned to provide general education for personal enrichment and to serve as a base on which to build specialized professional courses. The remainder of the courses provide training for professions. Ten major areas of specialization and a general major are available. Special programs allow able students to concentrate in both a major area of home economics and a related area of science. Men and women students from other schools in the University also may take courses in home and family education or in technical phases of home economics.

CAREER OPPORTUNITIES

Many diverse career opportunities are open to the graduate in Home Economics. A student may gain preparation for positions in fields such as:

EDUCATION —

junior and senior high schools; nursery schools; pre-school programs for children in hospitals, schools and day care centers; youth groups; adult groups.

INDUSTRY —

commercial and financial companies; consultant firms; manufacturing firms; merchandising; product development laboratories; public utilities; trade associations.

COMMUNICATIONS —

advertising; newspaper; magazines and trade journals; radio and television.

DIETETICS AND INSTITUTIONAL MANAGEMENT —

FACILITIES

Dawson Hall, located on south campus, houses the modern and fully equipped teaching laboratories and classrooms for equipment, foods, nutrition, textiles, clothing, housing and home furnishings, as well as research laboratories, student and faculty lounges, and an auditorium.

Three home management houses serve as teaching laboratories for home management and home furnishings. Students living there in small groups for a quarter's residence (required of most majors) gain experience in applying their training to a family situation.

The School of Home Economics in cooperation with the Department of Psy-

chology maintains a nursery school as a laboratory for courses in child development. The Department of Psychology collaborates in teaching and psychological testing, and offers a consultant service to parents. Adjacent to the nursery school is the infant center laboratory.

DEGREE OFFERED

Bachelor of Science in Home Economics.

GRADUATE STUDY

The School of Home Economics offers graduate study in several phases of work leading to either the Master of Science degree or the Master of Home Economics degree, administered by the Graduate School. For further information, refer to the Graduate School Bulletin.

Special Services

UNIVERSITY OF GEORGIA FAMILY COUNSELING SERVICE

ELIZABETH T. SHEERER, Counselor

The Family Development staff offers counseling services on premarital, family, and other personal problems. The main purpose of these services is to provide help for students, but a limited number of non-students may use this service. Those desiring services should apply directly to the counselor.

Degree Requirements

A student should acquaint himself with the general degree requirements applicable to all students of the University as set down in the General Information section of this catalogue.

HOURS

A total of 195 quarter hours is required for the Bachelor of Science in Home Economics degree.

GRADE AVERAGE

Any student, who does not have an average weighted grade of 73 or more at the end of the quarter in which 85 academic quarter hours of work have been completed, will not be entitled to continue in attendance in the School of Home Economics except by special permission of the dean. Such permission will be granted only in exceptional cases; required will be satisfactory achievement in basic freshman and sophomore courses. An average of at least C must be earned in all courses taken either in home economics or in the joint major area of concentration before credit for the course will be given for graduation.

BACHELOR OF SCIENCE IN HOME ECONOMICS

FRESHMAN AND SOPHOMORE REQUIREMENTS

	Hours
Art 120	5
Art or Music	3- 5
English 101-102, Composition	10
Literature	10
Speech 108	5
Science (Select from Item 2 below)	10-15
Social Science (Select from Item 3 below)	10-15
Home Economics 115, Foods	5
Home Economics 120, Clothing	5
Home Economics 175, Home Furnishings	5
Home Economics 224, Textiles	5
Home Economics 293, Family Relations	5
Physical Education 1-2	6

Note on freshman and sophomore requirements: Home Economics 224, 343, and 306 may be taken in either the sophomore or junior year.

JUNIOR AND SENIOR CORE REQUIREMENTS

	Hours
Science (Select from Item 2 below)	5-10
Social Science	5-10
Home Economics 306 or 350, Foods	5
Home Economics 343, Household Equipment	5
Home Economics 351 or 358, Nutrition	5
Home Economics 368 and 369, Home Management	6
Home Economics 390 or 395, Infant or Child Development	5

Refer to the Major Concentrations for the total requirements of junior and senior years.

EXPLANATION OF TOTAL REQUIREMENTS

	Hours
1. English 101-102, Composition	10
Literature	10
Speech 108	5
2. Science (Minimum)	20

For all majors Chemistry 111 or 121 is required and at least ten of the hours must be taken in one subject area: chemistry, physics, mathematics, zoology, botany or bacteriology.

Specified sciences needed for the various majors are as follows:

Major in Clothing and Textiles: Chemistry 111 or 121 and 261, and Mathematics 100

Major in Dietetics and Institution Management: Chemistry 111 and 112 or 121 and 122, 261, 451; Zoology 101; Microbiology 350 (30 hours)

Major in Foods: Chemistry 111 and 112 or 121 and 122, 261 and 451

or 351; Zoology 101; Physics 127; Microbiology 395; Microbiology 350 (30 hours)	
Major in Family Development: Chemistry 111 or 121; Zoology 101	
Major in Housing and Home Management: Physics 127 and 128; Mathematics 100; Chemistry 111 or 121, 261	
Major in Home Economics Education: Microbiology 350; Chemistry 111 or 121 and 261; Zoology 101	
3. Social Science (minimum)	20
Select courses for at least two of the following: anthropology, economics, geography, history, philosophy, political science, psychology, sociology.	
Specific courses in social science required in certain curricula are as follows:	
Major in Clothing and Textiles: Economics 105; Marketing 360; Psychology 101	
Major in Dietetics and Institution Management: Psychology 101 and 371 or 414; sociology, economics, or psychology	
Major in Foods: Psychology 101	
Major in Family Development: Psychology 101; Sociology 105; Economics 105	
Concentration in Family Living, total requirement 25 hours.	
Concentration in Child Development, total requirement 20 hours.	
Major in Housing and Home Management: Economics 105; Psychology 101; Sociology 105	
Major in Home Economics and Art: Psychology 101	
Major in Home Economics Education: Economics 105; Psychology 101	
Major in Home Economics and Journalism: Economics 105; Psychology 101, 371	
4. Fine Arts	8-10
Art 120 and one course in music, art, visual arts, or crafts are to be chosen.	
Specific fine arts courses required in certain curricula are as follows:	
Major in Clothing and Textiles: Art 120 and two approved art courses (13-15 hours).	
Major in Home Economics and Art: Art 120, 130, and 140 in sequence (15 hours), plus 10 hours of approved art electives in the sophomore year	
5. Home Economics, core requirements	51
	Hours
115 Foods	5
120 Clothing	5
175 Home Furnishings	5
224 Textiles	5
293 Family Relations	5
306 or 350 Foods	5
343 Household Equipment	5
351 or 358 Nutrition	5
368-9 Home Management	6

390 or 395 Infant or Child Development 5

6. Major concentration and free electives 63-65

At least thirty hours should be selected to meet requirements of the major concentration.

7. Physical Education 6

CHOOSING A MAJOR

The major concentration is chosen upon completion of the freshman and sophomore requirements and must be approved by the Dean of the School. The major should conform to one of the plans listed under Major Concentrations. Minor changes in programs may be made upon recommendation of the major professor with approval of the dean.

Special Programs

HOME ECONOMICS AND NATURAL OR
SOCIAL SCIENCE

Men and women students may take special programs designed to provide concentration in a single major area of home economics and in a related area of natural or social science. This type of program may be taken only by a student of proven academic ability and with permission of the dean. The curriculum will be planned to meet the needs of each student, but must include at least 80 quarter hours of general education (humanities and sciences), 40 quarter hours in courses numbered 200 or above in the major area of home economics, and 40 quarter hours in specified related areas of science. These special programs are particularly suitable for students planning for graduate study in certain subject matter areas of home economics.

EXTENSION HOME ECONOMICS

The degree of Bachelor of Science in Home Economics is required for extension home economics work. Students preparing for employment in Cooperative Extension Service should take Agricultural Extension 313 and 314.

Suggested electives: Food Science 409; Landscape Architecture 313; Journalism 368 and 580; Home Economics 355; 364, 376, 377, 475, and 546.

Major Concentrations

CLOTHING AND TEXTILES

This major offers training in artistic and intelligent selection and care of clothing and household fabrics. It gives preliminary training leading to positions such as specialist or designer in clothing or textiles, fabrics or fashion coordinator, consumer consultant, retail buyer, writer for trade publications, college teacher, or research worker.

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
CLOTHING AND TEXTILES	33
Home Economics 223, Family Clothing	3
Home Economics 321, Advanced Clothing	5
Home Economics 360, Advanced Textiles	5
Home Economics 561, Clothing and Textile Economics	5
Three courses selected from the following:	15
Home Economics 363, Costume Design	
Home Economics 463, Historic Costume	
Home Economics 562, Tailoring	
Home Economics 564, Design and Draping	
FAMILY DEVELOPMENT	5
Home Economics 390 or 395, Infant and Child Development	5
FOOD AND NUTRITION	10
Home Economics 306, Foods	5
Home Economics 351, Nutrition	5
HOUSING AND HOME MANAGEMENT	11
Home Economics 343, Household Equipment	5
Home Economics 368-9, Home Management	6
BUSINESS ADMINISTRATION	10
Marketing 360	5
Electives	5
Arts and Sciences (See total requirements)	8-10
Electives	20-22
Suggested electives: Home Economics 357 or 370, 364, 376, 475, Art 130, 308, 317; Marketing 465, 560, 562, or 563; Chemistry 112 or 122, 223; Journalism 368; Sociology 105.	

DIETETICS AND INSTITUTION MANAGEMENT

This major meets the requirements of the American Dietetic Association for admission to all types of approved dietetic internships and for membership. It prepares the student for administrative and therapeutic dietetics as well as for the teaching of dietetics and for the graduate year in hospital dietetics. Students are also prepared for lunch room, tea room, or college dining hall management if electives are selected properly.

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
FOOD AND NUTRITION	30
Home Economics 306, Foods	5
Home Economics 351, Nutrition	5
Home Economics 354, Quantity Cookery	5
Home Economics 452, or 353, Advanced Nutrition	5
Home Economics 453, Nutrition in Disease	5
Home Economics 550 or 554, Experimental Foods	5

INSTITUTION MANAGEMENT	10
Home Economics 372, Management	5
Home Economics 574, Food Purchasing	5
CLOTHING AND TEXTILES	5
Home Economics 224, Textiles	5
FAMILY DEVELOPMENT	5
Home Economics 390 or 395, Infant or Child Development	5
HOUSING AND HOME MANAGEMENT	6
Home Economics 368-9, Home Management	6
MICROBIOLOGY 350	5
PSYCHOLOGY	5
Psychology 371 or 414, Applied Psychology or Psychology of Personnel	5
CHEMISTRY 451 or 301, Biochemistry	5
EDUCATION 304 or 455, Educational Psychology	5
Accounting 110	5
Arts and Sciences (See total requirements)	5
Electives	12-14
Suggested electives: Home Economics 355, 357, 546, 550, or 554, 572; Journalism 368.	

EXPERIMENTAL FOODS

This major offers training for students interested in educational, experimental, and promotional work in commercial fields, such as home service work, commercial food demonstration, or testing laboratories. A student may confer with his adviser in the selection of a sequence of electives to meet individual professional interests. Requirements for membership in the American Dietetic Association may be met through proper choice of electives.

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
FOOD AND NUTRITION	28
Home Economics 306, Foods	5
Home Economics 351, Nutrition	5
Home Economics 357, Food Demonstration	3
Home Economics 452 or 353, Advanced Nutrition	5
Home Economics 550, Experimental Foods	5
Home Economics 554, Experimental Foods	5
FAMILY DEVELOPMENT	5
Home Economics 390 or 395, Infant or Child Development	5
HOUSING AND HOME MANAGEMENT	11
Home Economics 368-9, Home Management	6
Home Economics 546, Equipment Testing or Home Economics 547, Lighting and Refrigeration	5
MICROBIOLOGY 350	5

EDUCATION elective	5
CHEMISTRY 451 or 351, Physiological Chemistry or Biochemistry	5
Arts and Sciences (See total requirements)	10
Electives	24-26
Suggested electives: Art 308; Food Science 409; Education 304 or 455; Journalism 368; Microbiology 395, 389; Physics 127; Psychology 414, 371; Mathematics 200 or Agronomy 423; Home Economics 354, 355, 574 or 370.	

FAMILY DEVELOPMENT

Concentration in Family Living

Preparation for work with agencies dealing with family adjustment, child serving agencies, or positions requiring professional work in family life as a focus. Students interested in research or college teaching in this area will be prepared for advanced study with this major.

JUNIOR AND SENIOR REQUIREMENTS

FAMILY DEVELOPMENT	Hours 25
Home Economics (Psychology) 395, Child Development	5
Home Economics (Sociology) 461, The Family	5
Home Economics 493, Family in the Community	5
Home Economics 495, Contemporary Family	5
Home Economics 496, Parent Education	5
Approved Electives in family development, sociology or Psychology	10

Concentration in Child Development

Preparation for work with young children through public and private nursery schools, child-serving agencies, and children's clinics and hospitals. Students interested in research or college teaching in this area will be prepared for advanced study with this major.

JUNIOR AND SENIOR REQUIREMENTS

CHILD DEVELOPMENT	Hours 35
Home Economics (Psychology) 395, Child Development	5
Home Economics 492, Child Guidance	5
Home Economics 496, Parent Education	5
Home Economics (Psychology) 408, Development Young Child	5
Home Economics 591, Pre-School Activities	5
Home Economics 311-12b, Nursery School Practicum	10
Home Economics 594, Nursery School Problems	5

OTHER JUNIOR AND SENIOR REQUIREMENTS

FOOD AND NUTRITION	Hours 10
Home Economics 306 or 350, Foods	5
Home Economics 351 or 358, Nutrition	5

HOUSING AND HOME MANAGEMENT	6
Home Economics 368-9, Home Management	6
Approved Electives	32-44
Home Economics 224, 343, and 390 are required; if possible, they should be taken in the sophomore year.	

Concentration in Child Development and Mental Retardation

Preparation for work with the mentally retarded at early developmental levels in child care centers, schools, and hospitals. Students interested in research, administrative positions, or college teaching in this area will be prepared for advanced study with this major. In addition to courses listed under Concentration in Child Development the courses listed below are required (instead of elective hours).

	Hours
Education 304, Educational Psychology	5
Exceptional Children 512, 518, 528	15
Exceptional Children (Psychology) 450, Language Development	5
Home Economics (Exceptional Children) 595, Severely Mentally Retarded	5

GENERAL HOME ECONOMICS

The general major is planned to give a broad cultural course and training for home-making. There are fewer required courses and opportunity exists for many electives. Specialized interests may be followed through careful choice of electives.

JUNIOR AND SENIOR REQUIREMENTS

	Hours
CLOTHING AND TEXTILES	10
Home Economics 224, Textiles	5
Home Economics 321, Advanced Clothing	5
FAMILY DEVELOPMENT	10
Home Economics 390, Infant Development	5
Home Economics (Psychology) 395, Child Development	5
FOOD AND NUTRITION	15
Home Economics 306 or 350, Foods	5
Home Economics 351 or 358, Nutrition	5
Foods elective	5
HOUSING AND HOME MANAGEMENT	6
Home Economics 368-9, Home Management	6
HOME ECONOMICS electives	10
Arts and Sciences (See total requirements)	10
Electives	32 - 34

General majors must select at least 15 elective hours in one field over and above specified courses.

HOUSING AND MANAGEMENT

This major provides training for careers in home service, management of multiple-unit or public housing projects, and assistance to architects, decorators, and household appliance companies.

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
HOUSING AND HOME MANAGEMENT	22
Home Economics 343	5
Home Economics 364, Family Economics	5
Home Economics 368-9, Home Management	6
Home Economics 376, Housing	3
Home Economics 377, Practical Furnishings	3
Home Economics 480, Housing Developments	5
Select from the following:	10-20
Home Economics 546, Equipment Testing	5
Home Economics 547, Lighting and Refrigeration	5
Home Economics 475, Advanced Furnishings	5
Home Economics 570, Consumer Problems	5
CLOTHING AND TEXTILES	5
Home Economics 321, Advanced Clothing	5
FAMILY DEVELOPMENT	5
Home Economics 390 or 395, Infant or Child Development	5
FOOD AND NUTRITION	10
Home Economics 306, Foods	5
Home Economics 351, Nutrition	5
Arts and Sciences (See total requirements)	10
Electives	21 - 23

Electives must be approved by major professor and should be scheduled after requirements of this major have been satisfied. Suggested electives: Agricultural Engineering 104-105; Art 216, 287, 351, 387, 389; Journalism 376; Landscape Architecture 255, 313; Sociology 409, 431; Physics 229; Statistics 200; Home Economics 564.

HOME ECONOMICS AND ART

The major in home economics and art is offered jointly by the School of Home Economics and the Department of Art. It is designed to provide an opportunity for specialization in interior design, crafts, ceramics, drawing and painting, or commercial art.

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
CLOTHING AND TEXTILES	10
Home Economics 224, Textiles	5
Home Economics 321, Advanced Clothing	5
FAMILY DEVELOPMENT	5
Home Economics 390 or 395, Infant or Child Development	5
FOOD AND NUTRITION	10
Home Economics 306 or 350, Foods	5
Home Economics 351 or 358, Nutrition	5
HOUSING AND HOME MANAGEMENT	17 - 19
Home Economics 343, Household Equipment	5

Home Economics 368-9, Home Management	6
Home Economics 376 or 480, Housing	3 - 5
Home Economics 377, Practical Furnishings	3
HOME ECONOMICS Electives	10
ART Electives	10 - 15
Arts and Sciences (See total requirements)	15
Electives	5 - 12
The art electives may be selected with approval of adviser from the areas of interior design, crafts, ceramics, drawing and painting, or commercial design.	

HOME ECONOMICS EDUCATION

The major in home economics education is offered jointly by the School of Home Economics and the College of Education. It fulfills the requirements for teaching in both vocational and non-vocational homemaking departments of Georgia high schools. The graduate in this program is qualified to receive a four year professional certificate.

Students who have not taken home economics courses within six years prior to the date of registration for completion of requirements for a degree in this major or for professional certification must take at least 20 hours of course work in home economics.

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
CLOTHING AND TEXTILES	5
Home Economics 321, Advanced Clothing	5
FAMILY DEVELOPMENT	10
Home Economics 390, Infant Development	5
Home Economics 395, Child Development	5
FOOD AND NUTRITION	13
Home Economics 306, Foods	5
Home Economics 351, Nutrition	5
Home Economics 357, Food Demonstration	3
HOUSING AND HOME MANAGEMENT	14
Home Economics 364, Family Economics	5
Home Economics 368-9, Home Management	6
Home Economics 376, Housing or	
Home Economics 377, Practical Furnishings	3
EDUCATION	30
Education 303, Introduction	0
Education 335.2, Home Economics Curriculum Planning	5
Education 336.2, Home Economics Teaching Procedures	5
Education 346-7-8.2, Home Economics Apprentice Teaching	15
Education 455, Adolescent Psychology	5
Arts and Sciences (See total requirements)	10
Electives	11 - 13

Prerequisites for Education 335.2 and 336.2 are as follows: Home Economics

224, 293, 306, 343, 390 or 395, and over-all average grade of 75 or above; evidence of fitness for teaching.

Suggested electives: Home Economics 355, 370, 461; Art 513; Food Science 409; Horticulture 311; Journalism 368, 537; Landscape Architecture 313; Psychology 258; Physical Education 118, 385, 387; Sociology 427.

HOME ECONOMICS AND JOURNALISM

The major in home economics and journalism is offered jointly by the School of Home Economics and the School of Journalism. It is designed to prepare students for journalistic work related to home economics with newspapers, magazines, radio, television or other areas of the communications field.

JUNIOR AND SENIOR REQUIREMENTS

	<i>Hours</i>
FAMILY DEVELOPMENT	5
Home Economics 390 or 395, Infant or Child Development	5
FOOD AND NUTRITION	10
Home Economics 306 or 350, Foods	5
Home Economics 351 or 358, Nutrition	5
HOUSING AND HOME MANAGEMENT	11
Home Economics 343, Household Equipment	5
Home Economics 368-9, Home Management	6
HOME ECONOMICS electives	15
PSYCHOLOGY 371	5
JOURNALISM 558	3
JOURNALISM electives	25
Arts and Sciences (See total requirements)	5
Electives	14 - 16

Required are Home Economics 224 and Journalism 368; if possible, they should be taken in the sophomore year.

Home Economics electives. Select 15 hours from one of these groups: (1) 355, 357, 377; (2) 321, 363, 561; (3) 364, 395, 493, 495, 496.

Journalism electives. Select at least 10 hours in one of three areas listed below; then expand in one area or combine two areas.

Magazine Writing: Journalism 456 and 590, 377, 351, 537.

Radio-Television: Journalism 580 and 585, 386, 583, 584.

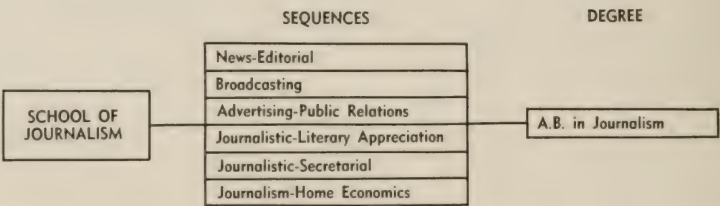
Advertising and Public Relations: Journalism 557 and 577, 576, 575, 578; Marketing 562, 563, 564.

The Henry W. Grady
School of Journalism

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The Henry W. Grady School of Journalism

JOHN ELDRIDGE DREWRY, A.B., B.J., A.M., Dean

General Information

ACCREDITATION

The Henry W. Grady School of Journalism is on the approved list of the Association for Education in Journalism. It also is a member of the American Association of Schools and Departments of Journalism, the national accrediting organization.

PURPOSE AND ORGANIZATION

The purpose of the School of Journalism is to offer the student a program of study which combines the essential elements of a liberal education and of professional training which may lead to broad variety of career opportunities in the challenging and remunerative field of communications.

The curriculum leading toward a Bachelor of Arts in Journalism degree is a four-way program which includes:

- (1) basic liberal arts courses;
- (2) basic communications courses;
- (3) a major chosen from six sequences; and
- (4) a supplementary major in subjects related to the major field of study.

In total hours, approximately three-fourths of the courses are general, and one-fourth technical.

Because effective communications is important in fields other than journalism, non-journalism students often select courses of study in the School of Journalism to improve their skills and to prepare for various careers.

Among these are: (1) pre-divinity students, law students, and forestry students, who will use journalistic skills in their careers; (2) students of social sciences, who recognize the role of the press and radio-tv, along with schools and churches, as an influence which reflects and in a measure directs the course of civilization; (3) students interested in writing, who wish to develop their abilities in observation, clear thinking, accuracy and effective expression; and (4) students who recognize the cultural benefits of such courses as the history of journalism, contemporary American magazines, and literary criticism. In addition, journalistic training in the reporting of lectures, interviewing, and article research aids in the study of liberal arts subjects.

CAREER OPPORTUNITIES

Journalism today encompasses the entire communications field. It includes metropolitan dailies, small town dailies and weeklies, press associations and syndicates, radio and television, employee publications and trade journals, general magazines,

various aspects of book publishing, advertising and public relations, much of the production and promotion work in motion pictures and the theatre, editorial, instructional and research work for schools, colleges, and various social agencies. The study of journalism is excellent preparation for a broad variety of professions because effective communications is vital to virtually all fields.

FACILITIES

The School of Journalism is housed in the Commerce-Journalism Building on north campus. In addition to ample classroom space, there are radio-tv studios, a record and seminar room, an editorial laboratory equipped with typewriters, press association wire service, and a copy desk; a large reading room with newspapers and periodicals; a dark room for the photography course; and a large auditorium for special lectures, institutes, and conferences.

The printing division of the University is a department of the School of Journalism, and serves as the typography laboratory of the School. The purpose of the laboratory work is not to teach printing but to familiarize students with the principles of typography involved in editing copy, writing headlines, preparing advertising layouts, and in making up newspapers and magazines.

Construction of a new Journalism-Psychology-Classroom Building is expected to be complete by 1968. This new structure will provide the most modern instructional facilities for every phase of communications.

DEGREES OFFERED

The School of Journalism offers the undergraduate degree of Bachelor of Arts in Journalism.

GRADUATE STUDY

The degree of Master of Arts in Journalism is offered by the Graduate School of the University. Refer to the Graduate School Bulletin for further information.

FIVE YEAR PROGRAM

A student who has received the A.B. degree from a college belonging to a standard regional association may satisfy the requirements for the A.B. in Journalism degree with a minimum of 45 hours in journalism, selected with the approval of the Dean of the School of Journalism. Such a student must be in resident at the University three quarters.

ONE-YEAR COURSE

To serve as a refresher course for returned veterans and others who wish to spend only one year in college, the School of Journalism offers a special three-quarter program, normally consisting of 45 hours of journalism and related subjects. Only those persons with a serious and definite reason are admitted to this short program. A student who enrolls for the special, one-year program may later become a candidate for the A.B. in journalism degree by meeting all entrance and residence requirements.

PRACTICAL WORK

Journalism instruction includes not only textbook study, lectures, recitations, and analytical assignments, but practice under careful supervision. This offers the student an excellent opportunity to prepare himself for a future career. For example, students taking reporting courses actually cover news events in the city and on campus. They gather news and write copy which may be published either in the campus newspaper or in the Athens daily newspapers.

Theoretical instruction in broadcasting, editing, headline writing, and make-up is supplemented with laboratory practice. Many students have feature articles, which have been written in connection with their course work, accepted by newspapers and magazines.

In addition, field trips, publication of special editions, and work as correspondents for metropolitan newspapers and press associations are all a part of this practical training. Several students work for the local newspapers and radio-tv stations.

INTERNSHIP AND "CO-OP" STUDY

Under the Internship plan, certain students are placed with newspapers, radio-tv stations, advertising departments, and in other phases of journalism work for a quarter of practical experience, usually during the vacation period between their junior and senior years. This work is in addition to the required resident journalism classes.

The "Co-op" plan allows two students to alternate university study and employment in the field quarter by quarter. Arrangements for internship and "Co-op" study are made through the office of the Dean of the School of Journalism.

STUDENT PUBLICATIONS

The University has a semi-weekly newspaper, *The Red and Black*, the editorial staff is composed largely of students in the School of Journalism. The campus annual, *The Pandora*, and other publications also have journalism students on their staffs.

Honors Program

Qualified students are urged to participate in the Honors Program in both the junior and senior divisions which is administered by the College of Arts and Sciences. For further information, refer to the College of Arts and Sciences section of this catalogue or write for a copy of *The Honors Program Student Handbook*.

Special Services and Institutes

Georgia Press Institute is designed to assemble annually those associated with newspapers, press services, and related phases of journalism and students for addresses and workshop sessions on subjects of journalistic interest. It is sponsored jointly by the Georgia Press Association and the School of Journalism.

Georgia Radio and Television Institute assembles broadcasters and students to hear addresses and join in discussion of various broadcasting-television problems. It is sponsored jointly by the Georgia Association of Broadcasters and the School of Journalism.

Southern Industrial Editors Institute meets annually and is patterned after the Press Institute; however, the emphasis is on employee publications, trade journals, public relations, and specliaized magazines. It is sponsored jointly by the Southern Council of Industrial Editors and the School of Journalism.

News Coverage Workshop is a short course offered annually to a limited number of newspapermen and women as a refresher course in professional techniques. It is supported by the Georgia Press Association, the Newspaper Fund of the *Wall Street Journal*, and the newspapers whose staff members are enrolled.

Georgia Scholastic Press Association has a three-fold objective: (1) to stimulate interest in high school writing courses; (2) to raise the standards of high school journalism; (3) to bring about a closer association between the Henry W. Grady School of Journalism and the high school students in Georgia interested in journalism. It is sponsored by the School of Journalism and the University chapter of Sigma Delta Chi. Each year the Association holds a convention for high school journalists, which includes lectures and discussions of various phases of school publication work. *Georgia Collegiate Press Association* has the following objectives: (1) to provide a closer association among the college journalists of Georgia; (2) to provide a means of recognizing meritorious journalistic efforts; (3) to raise the standards of the college press of Georgia; (4) to foster among college journalists of Georgia an interest in journalism not only as a profession, but as an important social science. The Association was organized by the School of Journalism and the University Chapter of Sigma Delta Chi. Meetings are held regularly, usually in conjunction with the Georgia Press Institute.

Education-Industry Conferences on Advertising and Public Relations are co-sponsored by the National Association of Manufacturers and the School of Journalism. These two conferences brings outstanding persons to the campus for addresses and panel discussions.

Special Lectures. Outstanding individuals from various fields of Journalism are frequently guest lecturers at the Grady School of Journalism. These include leading advertising, public relations, newspaper, and broadcasting persons from throughout the state and the nation.

The George Foster Peabody Radio and Television Awards provide annual recognition of programs, stations, networks, and individuals. The most distinguished and meritorious public services rendered each year by the broadcasting industry are recognized. Nationally prominent Americans constitute the personnel of the Advisory Board which administers these awards through the School of Journalism.

Degree Requirements

Students are required to acquaint themselves with general degree requirements applicable to all students of the University as set down in the General Information section of this catalogue.

Grade Requirements

A minimum grade of C (73) is required in all major subjects. An average of C with not more than 45 hours of D grades must be obtained in order to be eligible for

graduation. Any student who does not have a 73 or better average at the end of his sophomore year or whose performance on the Sophomore Comprehensive Examination is unsatisfactory will be allowed to continue in the School of Journalism only with the approval of his sequence head and the Dean of the School of Journalism. All supplementary major subjects and electives shall be chosen with the approval of the sequence head and the Dean of the School of Journalism and are determined by the sequence in which the student is interested.

COURSE REQUIREMENTS

The following non-journalism courses (core curriculum) are required in all sequences:

	<i>Hours</i>
English 101-102	10
English 121-122 or English 121 and 310	10
Physical Science	10
Biological Sciences	10
Foreign Language	10, 15, or 20
Social Science	5
History 111-112 or 251-252	10
Political Science 101	5
Psychology 101	5
Physical Education 1-2	6
Basic ROTC	6

The following journalism courses are required in all sequences and are part of the core curriculum. Those marked with an asterisk are non-technical or vocational, and are to be regarded as part of the liberal arts content of the degree requirements.

	<i>Hours</i>
Journalism 101 or 350 (Basic Communications Techniques)	5
*Journalism 120 or 420 (Principles, Ethics, and Literature)	5
*Journalism 130 or 430 (History)	5
*Journalism 140 or 440 (Public Opinion)	5
Journalism 454 (Law)	5
*Journalism 456 (Magazines)	5
Journalism 557 (Advertising and Public Relations)	5
Journalism 580 (Radio-Television)	5

EXPLANATION OF CORE CURRICULUM REQUIREMENTS

	<i>Hours</i>
English 101-102: A minimum average grade of C (73) is required	10
English 121-122: French 201-202 or Spanish 201-202 or German 201-202 or Italian 201-202 may be taken in lieu of English 121-122	10
Physical Science: Two courses to be selected from Chemistry 121, 122; Geology 125, 126; Mathematics 100; Physical Geography 104; Physical Science 101; Physics 120	10
Biological Sciences: Two courses to be selected from Biology 101-	



102, Botany 121, 122; laboratory psychology, and Zoology 101, 102	10
Foreign Language: Students who offer for entrance two or more units of a foreign language (Greek, Latin, French, German, Spanish, Italian or Portuguese) are required to take at least two courses in foreign language at the University. Students who choose to continue at the University the language they offered for entrance are required to take courses in 103 and 104. Those students who enter without any foreign language credits may absolve the language requirements by satisfying one of the following options: (1) two courses in each of two languages; (2) three courses in one language; (3) two courses in a foreign language plus Classical Culture 301 or 302 and 310. Those students selecting the last option and those who elect to take 20 hours of foreign language at the University will be required to take only 15 hours of English (101, 102, and 121)	10, 15 or 20
Social Science: Economics 105 or 106, Geography 101, Philosophy 104, Political Science 202, Social Science 104, or Sociology 105	5
History 111-112 or 251-252. History 251-252: Exempts students from taking examinations on the history of the United States and Georgia. (See general degree requirements in the General Information section)	10
Political Science 101: Students who transfer credit for Political Science 101 from an out-of-state school must satisfy the Georgia Constitution requirements by successfully completing History 459 or Social Science 104 or by passing an examination on the Constitution of the State of Georgia	5
Psychology 101	5
Students who cannot operate a typewriter are required to take Business Education 107 or 303-304-305 during their freshman year.	
A student will not be permitted to register for senior division courses until he has passed the non-journalism courses in the core curriculum.	

Programs of Study

SEQUENCES: The six sequences available to students in the School of Journalism are: Advertising-Public Relations, Broadcasting, News-Editorial, Journalistic-Literary Appreciation, Journalistic-Secretarial, and Journalism-Home Economics. A student ordinarily does not make his selection of a sequence until the beginning of his junior year, or after he had orientation courses, and counseling in the various phases of journalism.

SUPPLEMENTARY MAJOR: The supplementary major includes those subjects which will be most useful to the major field of study. For example, history, political science, and economics may be selected to supplement a news-editorial major; speech, drama, and music for radio-tv; applied psychology, business administration, and art for advertising-public relations.

A student who wishes to follow a career in teaching and in supervising school publications and public relations may take the required courses in education as part of the Bachelor of Arts in Journalism degree. Or he may combine journalism with art, drama, economics, English, government, history, home economics, music, or other related fields in which he is interested.

AGRICULTURE

A student registered in any department within the College of Agriculture may choose a major in journalism, which would prepare him for communications work in an agricultural field. For complete information and suggested journalism courses, refer to the College of Agriculture section of this catalogue.

ADVERTISING-PUBLIC RELATIONS SEQUENCE

In addition to the core curriculum, a maximum of 25 hours from the following courses in journalism, including those marked with the asterisk (*) for those especially interested in advertising and two asterisks (**) for those interested in public relations:

	<i>Hours</i>
**Journalism 100, 200, or 300 (Production)	1
Journalism 308 (Advertising Layout)	5
**Journalism 310 (Senior Seminar)	1
Journalism 351 (Editing)	3
Journalism 352 (Typography and Make-up)	3
Journalism 377 (Photojournalism)	3
Journalism 564 (Newspaper Management)	3
Journalism 565 (Broadcasting Management)	3
Journalism 574 (Advertising Campaigns)	5
*Journalism 575 (Advertising Copy)	5
*Journalism 576 (Advertising Media)	5
**Journalism 577 (Public Relations)	5
Journalism 578 (Retail Advertising)	5
Journalism 584 (Radio-TV Advertising)	5
Journalism 590 (Specialized Periodicals)	5
**Journalism 591 (PR Case Studies)	3
**Journalism 592 (PR Media)	3

Supplementary Major of at least 30 hours from art, economics, history, management, marketing, political science, psychology, sociology, and speech. Electives to complete a total of 195-197 hours.

BROADCASTING SEQUENCE

In addition to the core curriculum, a minimum of 25 hours from the following courses in journalism, including those marked with the asterisk (*):

*Journalism 100, 200, or 300 (Production)	1
Journalism 351 (Editing)	3
Journalism 486 (Oral Interpretation of Prose and Poetry)	5
Journalism 487 (Oral Interpretation of Dramatic Literature)	5

Journalism 544, 545, 546 (5 hours each) (Radio-TV Acting, Directing, and Production)	15
*Journalism 565 (Broadcasting Management)	3
*Journalism 581 (Radio-TV News)	5
*Journalism 582 (Radio-TV Programming)	5
Journalism 583 (Radio-TV Performance)	5
Journalism 584 (Radio-TV Advertising)	5
Journalism 585 (Television)	5
Journalism 586 (Cinematography)	5
Journalism 588 (Educational TV Production)	5
Journalism 589 (Advanced Educational TV Production)	5

Supplementary Major of at least 30 hours from areas relating to broadcasting, such to be determined and approved by head of sequence. Electives to complete a total of 195-197 hours.

JOURNALISM—HOME ECONOMICS SEQUENCE

Non-journalism courses required in all sequences (core curriculum)	85-87 or 90-92
Journalism courses required in all sequences (core curriculum), plus Journalism 308, 351, and 558	51
Home Economics 115 (Meal Preparation and Serving)	5
Home Economics 120 (Clothing Selection and Construction)	5
Home Economics 325 (Grooming for Men and Women)	3
Home Economics 293 (Family Relationships)	5
Home Economics 343 (Household Equipment)	5
Home Economics 370 (Food Selection and Buying)	3
Home Economics 390 (Prenatal and Infant Development)	5
Electives, chosen with approval of Dean of School of Journalism, to complete a total of	195-197 hours

JOURNALISTIC—LITERARY APPRECIATION SEQUENCE

In addition to the core curriculum, a minimum of 25 hours from the following course in journalism, including those marked with the asterisk (*):

Journalism 100, 200, or 300 (Production)	1
*Journalism 351 (Editing)	3
*Journalism 360 (Advanced Reporting)	5
Journalism 362 (Fiction Writing)	3
Journalism 537 or 577 (Public Relations)	3 or 5
Journalism 377 (Photojournalism)	3
Journalism 553 (Editorials)	3
*Journalism 558 (Article Writing)	3
*Journalism 563 (Advanced Fiction and Article Writing)	3
Journalism 590 (Specialized Periodicals)	5

Supplementary Major of at least 30 hours from the humanities, fine arts, social sciences. (American and English literature courses especially recommended). Electives to complete a total of 195-197 hours.

JORNALISTIC—SECRETARIAL SEQUENCE

In addition to the core curriculum, a minimum of 25 hours from the following courses in journalism, including those marked with the asterisk (*):

*Journalism 100, 200 or 300 (Production)	1
*Journalism 351 (Editing)	3
*Journalism 352 (Typography and Make-up)	3
Journalism 377 (Photojournalism)	3
Journalism 553 (Editorials)	3
Journalism 558 (Article Writing)	3
Journalism 559 (Book Reviewing)	3
Journalism 567 (Contemporary Newspapers)	3
*Journalism 577 (Public Relations)	5
Journalism 590 (Specialized Periodicals)	5

Supplementary Major of at least 30 hours, including Business Education 108, 300, 301, 302, 310, and necessary courses in typing; and Accounting 110 or Business Administration 370. Electives to complete a total of 195-197 hours.

NEWS—EDITORIAL SEQUENCE

In addition to the core curriculum, a minimum of 25 hours from the following courses in journalism, including those marked with the asterisk (*):

*Journalism 100, 200, or 300 (Production)	1
*Journalism 351 (Editing)	3
*Journalism 352 (Typography and Make-up)	3
*Journalism 360 (Advanced Reporting)	5
Journalism 377 (Photojournalism)	3
Journalism 537 or 577 (Public Relations)	3 or 5
Journalism 553 (Editorials)	3
Journalism 558 (Article Writing)	3
Journalism 559 (Book Reviewing)	3
Journalism 564 (Newspaper Management)	3
Journalism 565 (Broadcasting Management)	3
Journalism 567 (Contemporary Newspapers)	3
Journalism 581 (Radio-TV News)	5
Journalism 590 (Specialized Periodicals)	5

Supplementary Major of at least 30 hours from English and such social sciences as history, political science, sociology, and psychology. Electives to complete a total of 195-197 hours.



The School of Law

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The School of Law*

LINDSEY COWEN, B.A., L.L.B., L.L.M., Dean

JOHN BARTOW REES, JR., B.A., L.L.B., Assistant Dean

General Information

The School of Law is a member of the Association of American Law Schools and is on the approved list of the American and Georgia Bar Associations. The School of Law also has been registered by the Regents of the University of the State of New York as meeting the requirements for admission to the Bar of that state.

PURPOSES AND METHOD OF INFORMATION

The courses of study offered in the School of Law are designed to give a thorough knowledge of the Anglo-American system of common law and to familiarize the student with statutory laws with which he must deal. Emphasis is placed on teaching the student how to make a practical application of the legal principles he learns. The school also undertakes to shape the interests and aims of its students so as to make them respected and useful citizens and to instill in them that high sense of personal honor and regard for professional ethics that should characterize members of the legal profession.

In general, the school operates under the case method of instruction as best designed to enable students to master the common law and equity as working systems. The student studies actual cases, deducing from them the principles of law involved, and this approach tends to develop in the student the power of analysis of legal problems. In addition, however, the study of cases is supplemented by statutory and textual materials. This method of instruction accords with that followed by the leading law schools of the country. Instruction is given in the drafting of legal instruments by requiring the students to prepare, under the supervision of an instructor, contracts, leases, deeds, wills, charters, and other legal documents.

Practical instruction in the preparation and trial of cases is given in a practice court under conditions made as nearly as possible like those prevailing in the courts of the State. The work of this court is carried on under the direction of a member of the faculty, judges, and practitioners. Here are taken up matters relating to the preparation of pleadings, examination and cross-examination of witnesses, writing of briefs, presentation of arguments to the court and jury, taking of cases from lower courts to appellate courts, and other related subjects of a practical nature.

FACILITIES

The School of Law Building, situated on the north campus, consists of a building completed in 1931 and a 2.75 million dollar addition completed in 1967. The new structure provides seven times more space and includes a law library sufficient in size to house 225,000 volumes. Under an accelerated purchase program the Law

*For complete and detailed information on the School of Law, write for the Law School Bulletin, School of Law, University of Georgia, Athens, Georgia 30601.

Library, by June 1969, will exceed 160,000 volumes in size. The combined facilities of the original building and the addition have been described as among the finest in the world.

In addition, the general University Library is immediately adjacent to the School of Law, and these facilities are also immediately available to students of the School.

DORMITORY

The Law and Graduate Students Dormitory, a modern three-story brick building houses one hundred and fifty students. The bedrooms will accommodate two students and are furnished with beds, desks and chairs, a lavatory and cabinet. On each floor is a study room with table and chairs. There are bathrooms, water fountains, laundry chutes and other facilities on the three floors. A library and lounge on the first floor has a complete set of Georgia Appellate Reports, the Code, and a number of law treaties. Charges are \$101 per quarter, which includes a limited amount of flat-work laundry. Distinct advantages are gained by law students living and working together in the Law and Graduate Students Dormitory.

DEGREES OFFERED

The School of Law offers the Bachelor of Laws degree.

SPECIAL SERVICES

Continuing Legal Education

The School of Law, through its Continuing Legal Education staff, plans and conducts seminars, institutes and short courses for general practitioners. Specialty programs in judicial administration and programs in specialized areas of the law are also offered. Where practicable, the School of Law will cooperate with local bar associations in the sponsorship and presentation of regional programs in subjects of particular interest and importance to the localities concerned.

In August, 1965, the School of Law joined with the State Bar of Georgia and the law schools of Mercer and Emory in the establishment of "The Institute of Continuing Legal Education in Georgia." Through this institute, which combines the resources of the University with those of the other sponsoring agencies, it is contemplated that year-round, high-quality, state-wide continuing legal education programs will be made available to all Georgia attorneys.

Georgia Law Review

The GEORGIA LAW REVIEW is a legal periodical published four times a year by students of the Law School. Membership on its Editorial Board is limited to students of high academic rank who have demonstrated outstanding literary ability. The publication is prepared as a service to the legal profession and presents material written by judges, attorneys, teachers of law and students.

Lectures

In order that students may receive first-hand knowledge of what is actually taking place in the courts and of the development in the various fields of the law, a number

of distinguished lawyers and judges deliver lectures on phases of the law in which students may be particularly interested.

In recent years the John A. Sibley Lectures in Law have brought to the School of Law some of the nation's most distinguished legal scholars.

Placement

The Law School offers assistance to students in finding legal positions upon graduation. Complete files are maintained on all students in the School and information is made available to interested parties. Through cooperation with the organized alumni, placement committees of the State Bar of Georgia, Circuit Bar Associations, and other groups, as well as through the efforts of individual members of the law faculty, graduates have little difficulty finding satisfactory connections in the practice or in other fields.

SCHOLARSHIPS, LOANS AND STUDENT EMPLOYMENT

Law students are eligible for State Scholarships, repayable by practice in rural or semi-rural areas of Georgia. A number of other scholarships are also available from the State Scholarship Commission, the Law School Fund and other sources. A great many loan funds are available for University Students generally, as well as some particularly for law students. Part time employment is permissible, but not recommended. See the Law School Bulletin or write the Dean of the School of Law for further information.

Admission

GENERAL REQUIREMENTS

An applicant for admission to the School of Law as a candidate for the degree of Bachelor of Laws must present satisfactory evidence that he is a graduate of a college of approved standing. Compliance with minimum standards does not, however, guarantee admission. "Acceptable required work" connotes more than satisfaction of minimum academic requirements; it represents, rather, substantial scholastic attainment. Moreover, suitability of an applicant for admission should be gauged not only by his undergraduate record, but also by his character and reputation, the nature of his training and experience, and by his demonstrated aptitude for the study of law.

The School of Law admits both men and women students as candidates for degrees.

The prospective law student should seek a broad general education. It is important to be well trained in the use of English and to be able to write effectively. In addition, as many as possible of the following subjects should be studied: History, logic, philosophy, mathematics (at least the elementary courses), enough science to appreciate its importance, some economics, government, and psychology. Some knowledge of sociology and the ability to speak are useful to a lawyer.

LAW SCHOOL ADMISSION TEST

All applicants must take the Law School Admission Test, administered by Educational Testing Service of Princeton, New Jersey, and submit results to the Director of Admissions. Application blanks for this test may be secured from The University of Georgia Guidance Center or from the Educational Testing Service, Princeton, New Jersey. The application blank includes all instructions and information the applicant will need, including sample test questions. Additional information concerning the Law School Admission Test may be obtained from The University Guidance Center, The University of Georgia, Athens, Georgia.

TRANSFER STUDENTS

The Dean may, in his discretion, give full credit for work done in other law schools which are members of the Association of American Law Schools. Under no circumstances, however, will advanced credit be given for more than two years of work. The last year of work, on the basis of which a degree is granted, must be taken in this School of Law.

APPLICATION

For complete application procedure, write for the Law School Bulletin, School of Law, University of Georgia, Athens, Georgia 30601.

Beginning students are admitted only in September. All applications for admission to the first year class together with the necessary papers (i.e., transcripts and test scores) should be submitted not later than June 1.

Every applicant for admission to the School of Law must have a complete transcript of all college work sent to the Dean of the School of Law.

The School
of Pharmacy

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The School of Pharmacy

KENNETH LEE WATERS, A.B., M.S., Ph.D., Dean

General Information

The School of Pharmacy is accredited by the American Council on Pharmaceutical Education.

PURPOSE

The objective of the School is to give men and women schooling in pharmacy and its allied sciences that will enable them to meet successfully the present and future demands of their chosen profession. It is felt that this can best be done by co-ordinating instruction in the cultural and scientific courses with instruction of a distinctly technical nature. Pharmacy offers the student a career as a professional man, as a businessman, as a scientist and presents a challenge to aid in the war against disease.

CAREER OPPORTUNITIES

Pharmacy is recognized and respected as a flourishing and diversified profession that deals with the preparation, distribution, identification, storage, preservation, standardization, intended use and administration of medicinals—a profession that requires an understanding of economics, law, public and interprofessional relations. Pharmacy offers many fields—community, hospital, industrial, military or governmental pharmacy; research and teaching; pharmaceutical salesmen, wholesalers or administrators; market researchers; inspectors—to mention a few.

FACILITIES

The School of Pharmacy's new building is an integral part of the University Science Center. The building has 96,000 square feet of space and is one of the most modern pharmacy buildings in the United States, having won an award for design excellence from the American Institute of Architects. It is completely air-conditioned and is equipped with ample classrooms, laboratory and research facilities.

DEGREES OFFERED

The School of Pharmacy offers the degree of Bachelor of Science in Pharmacy.

GRADUATE STUDY

The University of Georgia Graduate School offers the degree of Master of Science with majors in Pharmacy, Pharmacognosy, Pharmacology, Hospital Pharmacy, or Pharmaceutical Chemistry.

The Ph.D. degree is offered through the School of Pharmacy with major areas of concentration in Pharmacy, Pharmacology, and Pharmaceutical Chemistry.

The rules and regulations of the Graduate School apply to candidates for the

Doctor of Philosophy degree. For further information, refer to the Graduate School Bulletin.

INTERNSHIP

In order to practice pharmacy in the State of Georgia, one year of full time internship must be served under the supervision of a registered pharmacist. Credit may be received only after a student has completed a portion of his pre-pharmacy work. Students are encouraged to serve internship during the summer. No credit for internship will be given concurrently with school work.

All intern pharmacists must notify the Joint Secretary, State Examining Boards, 224 State Capital, Atlanta, Ga. The Pharmacist supervising the intern must also notify the Joint Secretary that the intern is under his supervision. Termination of any portion of the internship must be reported by the pharmacist and the intern.

All practical experience must be recorded in a notebook in diary form and must be certified by a pharmacist or pharmacists supervising the experience. Upon the completion of the internship, the notebook must be notarized and submitted to the State Board of Pharmacy at the time of the examination.

Admission Requirements

To be admitted to the professional program in the School of Pharmacy, a student must complete the pre-pharmacy requirements. At the University of Georgia, the pre-pharmacy program is conducted through the College of Arts and Sciences. The two years of pre-pharmacy training require the satisfactory completion of not less than 90 quarter hours of academic work in the liberal arts courses. In addition, students must meet the general requirements for military science and physical education. Students with high academic average, having 90 hours of credit, may be admitted with not more than 15 quarter hours of deficiencies in required courses, provided such deficiencies are cleared with their pre-pharmacy adviser and are completed during their first professional year.

Application to the School of Pharmacy will normally be made by April 1. Those students taking pre-pharmacy work on the University campus will make application to the Dean of the School of Pharmacy when they have completed five quarters of work and are currently enrolled for 15 hours.

To be admitted, students must have a C plus average and have taken the Pharmacy Aptitude Test. An interview is also required. Arrangements should be made for interview and testing at the time the application is submitted.

Degree Requirements

The School of Pharmacy requires students to complete a minimum of five years for the degree Bachelor of Science in Pharmacy. The program consists of two years of pre-pharmacy work followed by three professional years.

HOURS

In order to receive the Bachelor of Science degree in the School of Pharmacy, a student must have completed not less than 235 quarter hours of work with a graduating average of at least C.

RESIDENCE

A student must spend a minimum of nine quarters in residence. Because of the sequence of courses, this generally requires three calendar years regardless of the amount of advanced credit offered.

ACADEMIC WORK LOAD

All professional students in the School of Pharmacy must take a minimum academic load of thirteen credit hours per quarter.

SPECIAL SCHOLARSHIP REQUIREMENTS

In addition to the general University requirements relative to scholarship, the following requirements must be met by all pharmacy students:

Any student registered in the School of Pharmacy who, at the end of the second year, does not have a graduating average of 73 or more in all work taken since entering the School of Pharmacy will not be entitled to continue in attendance in the school except by special permission of the pharmacy faculty. Such permission will be granted only in exceptional cases.

A student will not be permitted to register for the same course more than twice within any twelve month school year.

At least a grade of C must be earned in all required pharmacy courses and approved substitutes, before credit for the course will be given toward graduation.

CLASSIFICATION OF STUDENTS

Students will be classified as first, second and third year professional students. To be so classified a student must take the required courses and maintain an academic average of C.

LIMITATION OF STUDENT EMPLOYMENT

Since it is realized that the classroom work is only a part of the student's program in securing an education, a student should not accept employment which will interfere with his scholastic program. A student who makes a poor scholastic record will be required to reduce his work load or his scholastic load.

Required Curriculum

PRE-PHARMACY

	<i>Hours</i>		<i>Hours</i>
Chemistry 121-122-223 . . .	15	Economics 105	5
English (Must include 101 & 102)	15	Political Science 101**	5
Biology 101-102	10	General Electives***	15
Physics 127-128	10	Basic ROTC	6
History*	5	Physical Education	6
Mathematics 100-101	10		

*The History Qualifying Examinations will not fulfill this requirement.

**Exemption of Federal and Georgia Constitution will not fulfill this requirement.

***Electives should be chosen from the humanities, social sciences, psychology, or languages and should not be science, business or applied courses.

PROFESSIONAL PROGRAM
FIRST PROFESSIONAL YEAR

	<i>Hours</i>		<i>Hours</i>
Pharmacy Orientation 320	2	Pharmacy Law 390	3
Pharmaceutical Calculations		Inorganic Pharmacy 322	3
323	3	Physical Pharmacy 378	4
Chemistry 340-1-3****	13	Chemistry 280	5
Pharmaceutical Preparations		Electives	10
321	4		
Microbiology 350	5		

SECOND PROFESSIONAL YEAR*****

	<i>Hours</i>		<i>Hours</i>
Compounding and Technology		Medicinal Chemistry 440-1	8
406-7-8	12	Drug Assay 402	5
Pharmacognosy 404-5	8	Biopharmacy 447	5
Introductory Pharmacology		Biological Science	5
450	4		

THIRD PROFESSIONAL YEAR

	<i>Hours</i>		<i>Hours</i>
Dispensing Pharmacy		Drug Store Operation 596-7	8
537-8-9	12	Field Trips*****	0
Pharmacology 581-2-3	12	Electives professional****	9
Microbiology 352	3		
Pharmaceutical Accounting			
510	5		

****Those students required to complete Chemistry 343 will take only 6 hours of professional electives in the third year.

*****Proficiency in typing, without credit, will be required for admission to the second professional year.

*****Students annually visit hospitals, pharmaceutical manufacturers, and wholesale houses and are required to participate in such trips. Trips are made at the expense of the students.

The School of
Veterinary Medicine

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The School of Veterinary Medicine

L. MEYER JONES, A.B., D.V.M., M.S., Ph.D., Dean

A. L. KLECKNER, B.S., M.S., Ph.D., D.V.M., Associate Dean

General Information

The School of Veterinary Medicine is officially recognized as an accredited institution by the Council on Education of the American Veterinary Medical Association.

PURPOSE AND ORGANIZATION

In November, 1948, at the Southern Governor's meeting in Savannah, Georgia, a compact for regional education in veterinary medicine was ratified. Accordingly, the states of Maryland, Virginia, North Carolina and South Carolina are assigned by the Regional Council on Education to the University of Georgia, School of Veterinary Medicine. Approximately ten students who meet the qualifications from each of those states will be accepted for enrollment in veterinary medicine each September, while twenty qualified students will be accepted from the state of Georgia. This will give a class of 60 new students each year, making a total of 240 students in the school as a whole.

The School is composed of five departments, each with its full time staff of specialists, all holding D.V.M. and/or Ph.D. degrees. Clinical instruction is provided by the joint staffs of the Departments of Medicine and Surgery, Pathology and Parasitology, Medical Microbiology, Physiology and Pharmacology, and Anatomy and Histology.

Clinics are grouped into five major instructional units: Large Animal—medicine and surgery, including Outpatient Clinic and Hospital; Small Animal—medicine and surgery, including Outpatient Clinic and Hospital; Pathological Diagnosis—Clinical Pathology, Necropsy, and Parasitology Laboratories; Avian Medicine—Poultry diagnostic laboratory and selected poultry farm service; Ambulatory Farm Service—on the farm instruction in the treatment, surgery, and care of the sick animal and the handling of herd health problems.

Besides the teaching function, the School also serves as a research center for the investigation of animal and poultry diseases and other bio-medical and health related problems.

CAREER OPPORTUNITIES

The graduate veterinarian has many opportunities for service, several of which are indicated below.

Practice

A majority of veterinarians are engaged in varying types of private or group practice. General or mixed practices dealing with pet animals as well as with meat, milk and work animals are common. Specialized practices concerned with a single type of animal or a single species are becoming increasingly common. Included in the areas of specialization are pet animals and birds, farm animals, horses, zoo

animals, poultry, fur bearing animals and others. Integrated agricultural operations, initiated in recent years and still expanding, are demanding greater numbers of veterinarians for herd management and consultation services.

Teaching and Research

Numerous veterinarians are in the employ of Colleges of Veterinary Medicine as teachers or research workers or both. Others are associated with Colleges of Medicine as teachers of basic medical sciences, as laboratory animal care specialists or as essential research team members studying problems of comparative medicine. Veterinarians are likewise employed by veterinary science departments at State Agricultural Colleges and chiefly direct their instructional efforts toward teaching courses in sanitation and animal health to non-professional students. Many such departments also use the veterinarian in active research programs. Other research opportunities are available in government service, the Armed Forces, commercial firms, private laboratories, practice and elsewhere.

Government Service

Municipal, state and federal governments employ large numbers of veterinarians in fields of public health including the inspection of meat and milk, disease control and eradication, and basic and applied research. The Armed Forces of the United States use Veterinary Officers in disease prevention programs and to insure the wholesomeness of food consumed by their personnel. Significantly important roles are also played by veterinarians in the armed forces assigned to research, both through individual study and in association with other scientists on a large variety of health related problems. These include disease transmission, immunity, toxicology, radiation, aerospace medicine and other problems related to the advancement of man in these modern times.

Laboratory Animal Medicine

This is a relatively new field of endeavor for the veterinarian. In addition to maintaining healthy laboratory animal colonies at medical schools and research centers, the veterinarian participates as a member of research teams in the investigation of diseases and conditions common to both man and animal.

Commercial Work

Veterinarians are employed by many pharmaceutical and biological producers as research team members, production and promotional personnel or as consultants. Veterinarians are also employed by animal feed processors and human food processors in similar capacities.

FACILITIES

All departments of the School of Veterinary Medicine are housed in a modern, well designed building of ample size to serve all functions related to veterinary medicine. Classrooms and student laboratories, seminar rooms, library, administrative and departmental offices, auditorium, large and small animal clinics and hospitals are located in the building. In addition, space is conveniently provided for considerable research study.

DEGREES OFFERED

The School of Veterinary Medicine offers the Doctor of Veterinary Medicine degree.

GRADUATE WORK

Graduate programs leading to the Master of Science degree are offered in the Departments of Anatomy and Histology, Pathology and Parasitology, Physiology and Pharmacology.

The Department of Medical Microbiology offers a Master of Science and Doctor of Philosophy program in medical microbiology and, jointly with the Poultry Disease Research Center and the Poultry Department, a coordinated program in poultry diseases and parasites.

Students seeking admission to the Graduate School should apply to the Dean of Graduate School, The University of Georgia. For more detailed information, write for The Graduate School Bulletin, The University of Georgia, Athens, Georgia 30601.

HONOR CODE

The students in the school of Veterinary Medicine have drawn up and are working under a code of honor which covers the three specific areas of lying, cheating and stealing. This code is administered by student representatives from each class, and faculty members are present at trials only in an advisory capacity. The aim of the code is to develop personal integrity and unquestionable honesty as well as the personal responsibilities that are so important in maintaining and improving the ethical standards of the veterinary profession.

Special Services

INSTITUTE OF COMPARATIVE MEDICINE

Director: L. Meyer Jones

Associate Director: Lloyd J. Neurauter

The Institute of Comparative Medicine, School of Veterinary Medicine, was established in October 1965. The institute encompasses the research activities of the School of Veterinary Medicine. It functions as a coordinating center for biomedical and environmental health research and research training in the University. The staff of the Institute consists of research faculty of the School of Veterinary Medicine and of other departments in the University who are co-staffed on the professional and/or graduate programs of the school and are engaged in biomedical or environmental health research. Additional faculty engaged in health related research pertinent to the institute's programs may be joint-staffed as the programs develop.

Admission

Only those students who are residents of Maryland, Virginia, North Carolina, South Carolina and Georgia will be accepted for admission to the School of Veterinary Medicine at the University of Georgia. Applicants must apply and be recommended by the committee on veterinary student selection in that state.

Application blanks may be secured from the authorized persons at the Land Grant College in the respective states.

Maryland Residents
Pre-Veterinary Advisor
Department of Veterinary Service
College of Agriculture
University of Maryland
College Park, Maryland 20742

North Carolina Residents
Director of Instruction
School of Agriculture and Life
Sciences
North Carolina State
Raleigh, North Carolina 27607

Virginia Residents
Office of the Dean
College of Agriculture
Virginia Polytechnic Institute
Blacksburg, Virginia 24061

South Carolina Residents
Pre-Veterinary Adviser
Department of Animal Science
College of Agriculture and
Biological Science
Clemson University
Clemson, South Carolina 29631

Georgia Residents
Office of the Dean
School of Veterinary Medicine
University of Georgia
Athens, Georgia 30601

REQUIREMENTS FOR ADMISSION

In order to matriculate in the School of Veterinary Medicine, a student must present a minimum of 99-109 quarter hours credit (in addition to a maximum of 12 hours for physical education and ROTC) from an acceptable college with grades of C or better. Candidates are selected on the basis of character, personality, scholastic achievement and general fitness for the study of veterinary medicine. The requirements must be completed by June before admission the following September.

Entering classes in the School of Veterinary Medicine now average in excess of three years of collegiate training. A student admitted with only the minimum requirements will be competing with individuals having three or more years of college and thus beter equipped for the modern professional curriculum. Students planning a career in veterinary medicine are, therefore, strongly encouraged to undertake collegiate study over and above the minimum pre-veterinary requirements, preferably leading to the baccalaureate degree in conjunction with the D.V.M. degree.

MINIMUM PROGRAM FOR PRE-VETERINARY STUDENTS

	<i>Quarter Hours</i>
General Chemistry	12-15
Organic Chemistry	12-15
Physics	10-12
Mathematics	9-12
Biological Science (Botany, Zoology)	15-20
English	15-18
Social Science	(9-15) *

*May be satisfied by passing the examination on the Federal and Georgia Constitutions and on American and Georgia History. Students following a three-year Pre-Veterinary schedule must include 9-15 hours of Social Science courses in their curriculum even though they satisfy the constitution and history requirements by examination.

Animal, Dairy, Poultry Science	9-15
Animal Nutrition, Genetics	6-10
(Do not include Microbiology in the pre-veterinary curriculum)	

PRE-PROFESSIONAL PROGRAMS

A student wishing to prepare for acceptance to the School of Veterinary Medicine may register in either the College of Arts and Sciences or the College of Agriculture at the University for his pre-professional training. For complete information on the pre-professional programs, refer to the sections on the College of Arts and Sciences and the College of Agriculture in this catalogue.

There are an exceedingly large number of applicants seeking admission. In general, those having the highest scholastic rating will be given preference. It is advisable, therefore, that the student, upon entering college, decide whether he would prefer to continue his education in the College of Agriculture or in the College of Arts and Sciences, so that he may continue in a field other than veterinary medicine with a minimum loss of time in the event he is not admitted into the School of Veterinary Medicine.

VETERINARY APTITUDE TEST

Each applicant will be required to take one or more Veterinary Aptitude Tests. These tests must be completed before March first. A student may take these tests as many times as he desires, but to complete the requirements for applying, the applicant must have taken these tests within six months of the date of the application.

TRANSFER STUDENTS

Applicants for admission to the School of Veterinary Medicine who are known to have been dismissed from another veterinary school for any reason, shall not be accepted. Any student who shall gain entrance to the School of Veterinary Medicine by misrepresentation of the facts shall be immediately dismissed.

MICROSCOPE REQUIREMENTS

Students entering the School of Veterinary Medicine will be required to have a microscope of their own for use during the four year program. This microscope must meet certain minimum standards established by the Scholarship Standards Committee of the School of Veterinary Medicine. Specific information regarding these standards may be obtained by writing to the Chairman, Scholarship Standards Committee, School of Veterinary Medicine, University of Georgia, Athens, Georgia.

Degree Requirements

GENERAL

Upon completion of the four year professional curriculum, including a satisfactory proficiency evaluation and evidence of satisfactory performance in the required clinical courses, the student will be recommended by the Dean, through the Faculty, of the School of Veterinary Medicine for the degree of Doctor of Veterinary Medicine (D.V.M.)

GRADING SYSTEM

In addition to regulations governing the grading system of the University (see sections on Academic Regulations and Scholastic Probation and Dismissal in the General Catalogue), students in the School of Veterinary Medicine are subject to a grade-point proficiency evaluation established by the faculty and by student body representatives of the school. Under this grade-point system a student must possess a cumulative grade-point average of at least 1.5 to advance into the second year curriculum; 1.75 to advance into the third year curriculum and 2.00 to advance into the fourth year curriculum. A student who fails to make a scholastic average equivalent to at least 1.5 grade-points in any quarter during the professional course of study shall be placed on scholastic probation. A second probation during any subsequent quarter must be satisfactorily removed or the student may be dismissed.

VETERINARY CLINICS

Throughout the fourth year term, each student is on duty each day during clinic hours and on call at all times under staff supervision. Clinic conferences are supervised by the clinic staffs but entail active participation by each student.

RESIDENCE

In order to earn the Doctor of Veterinary Medicine degree, a student must spend four years in residence in the School of Veterinary Medicine. In addition, for a minimum of 10 weeks during the summer quarter between his third and fourth year he must be on duty at the School of Veterinary Medicine Clinics.

DEGREES WITH HONORS

The degree, Doctor of Veterinary Medicine, is awarded with honors to candidates who achieve specified scholastic records. The honors and specified scholastic records are: cum laude for a grade average of 90.0 to 92.9; magna cum laude for an average of 93.0 or better; summa cum laude for a record with all grades A or A+.

Four year Professional Curriculum

First Year

FALL QUARTER				WINTER QUARTER				SPRING QUARTER			
	Lec	Lab	Cr		Lec	Lab	Cr		Lec	Lab	Cr
311 Anatomy	2	13	7	312 Anatomy	0	15	5	313 Anatomy	3	8	5
404 Histology-				405 Histology-				406 Histology-			
Embryology	2	6	5	Embryology	2	6	5	Embryology	2	6	5
451 Physiol.				452 Physiol.				406 Physiology	3	4	5
Chemistry	4	2	5	Chemistry	4	2	5	410 Immunology	3	6	5
300 Vet Medicine	2	0	2	380 General							
				Microbiol.	3	4	5				

Second Year

	Lec	Lab	Cr		Lec	Lab	Cr		Lec	Lab	Cr
425 Pathology	3	4	5	426 Pathology	3	4	5	427 Pathology	3	4	5
407 Physiology	3	4	5	408 Physiology	3	5	5	410 Endocrinol.	4	3	5
430 Pharmacology	5	0	5	431 Pharmacology	4	2	5	408 Parasitology	3	6	5
422 Pathogenic				451 Virology	2	3	3	402 Lg. An. Med.	5	0	5
Microbiology	3	4	5								

Third Year

	Lec	Lab	Cr		Lec	Lab	Cr		Lec	Lab	Cr
403 Large Animal				416 Obstetrics	5	0	5	470 Infec. Dis.	5	0	4
Medicine	5	0	5	411 Small Animal				412 Small Animal			
410 Small Animal				Medicine	3	0	3	Medicine	3	0	3
Medicine	3	0	3	421 Surgery	5	3	5	475 Poultry Dis.	5	0	5
420 Surgery	5	0	5	403 Applied				422 Small Animal			
442 Poisonous				Anatomy	0	4	2	Surgery	5	3	5
Plants	0	4	2	461 Clin. Path.	3	6	5	480 Radiology	5	0	4
409 Parasitology	3	6	5	450-b Clinic				450-c Clinic			
450-a Clinic				Orientation	0	4	®	Orientation	0	4	®
Orientation	0	4	®								

Summer Quarter—Required, 10 Hours

451 Large Animal Clinics & Conf..... (2 hrs.)
 456 Small Animal Clinics & Conf..... (2 hrs.)

476 Ambulatory Clinics & Conf..... (2 hrs.)
 471 Pathol. Diagnosis & Conf..... (2 hrs.)
 486 Avian Clinics & Conf..... (2 hrs.)

Fourth Year

	Lec	Lab	Cr		Lec	Lab	Cr		Lec	Lab	Cr
471 Infec. Dis.	5	0	5	484 Food Hygiene	5	0	5	450 Nut&DefDis	5	0	5
480 Public Health	3	0	3	487 Jurisprud.	2	0	2	489 Vet. An. Mgt.	3	0	3
404 Lg. An. Med.	2	0	2	485 Bus. & Ethics	2	0	2	454 LAClin&Conf	0	9	2
452 LAClin&Conf	0	9	2	453 LAClin&Conf	0	9	2	459 SAClin&Conf	0	9	2
457 SAClin&Conf	0	9	2	458 SAClin&Conf	0	9	2	479 AmClin&Conf	0	4	2
477 AmClin&Conf	0	4	2	478 AmClin&Conf	0	4	2	474 PathDi&Conf	0	4	2
472 PathDi&Conf	0	4	2	473 PathDi&Conf	0	4	2	489 AviaCl&Conf	0	4	2
487 AvianCl&Con	0	4	2	488 AviaCl&Conf	0	4	2				

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The Graduate School

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The Graduate School

GERALD BOONE HUFF, B.A., M.A., Ph.D., Dean

ROBERT ANDERSON McRORIE, B.S., M.S., Ph.D., Associate Dean

THOMAS HILLYER WHITEHEAD, B.S., M.A., Ph.D., Coordinator of Instructional Institutes

MELVIN DURWARD LONG, B.S., M.A., Ph.D., Assistant to the Dean

General Information

PURPOSE

The Graduate School provides the opportunity for research and advanced study in all schools and colleges in the University. Basic fundamental research is supported through the Division of General Research, which is administered by the Associate Dean.

ORGANIZATION

The Graduate School confers graduate degrees in numerous fields, as listed under the topic Degrees Offered. Training leading to advanced degrees is coordinated by the Graduate Dean through two Divisions. The Division of Advanced General Study promotes thorough, creative study leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. The Division of Advanced Professional Study provides advanced training in the fields of the professional colleges.

The School of Social Work operates through the administrative facilities of the Graduate School, yet is a separate 6 quarter graduate professional school offering the Master of Social Work degree.

The Graduate School of Business Administration is an integral part of the College of Business Administration and is independent of the Graduate School. It offers two graduate degree programs, Master of Accountancy and Master of Business Administration.

FACILITIES

The Graduate School has access to the resources of the entire University. Of particular value are the University's libraries, containing over 800,000 volumes; U.S. Government publications; extensive document collections; microfilms; and numerous files. Graduate students may also use the Union Catalog for reference to the books and periodicals of Emory University, Agnes Scott College, Georgia Institute of Technology, State Department of Archives and History, and the Georgia State Library to supplement their research.

The research program at the Oak Ridge Associated Universities, Oak Ridge, Tennessee, makes available facilities for research problems and thesis writing, as well as certain fellowships. The University of Georgia Marine Institute at Sapelo Island has research programs in progress on marine and aquatic biology, biochemistry, marine and coastal geology, geochemistry, and plant physiology. The Social Science

Research Institute encourages studies in various disciplines concerned with changes of the people and culture in the South. The Institute of Higher Education serves as an institutional research facility for the University and assists individuals preparing for college teaching or institute research positions. The Institute of Radiation Ecology, with the support of the U.S. Atomic Energy Commission, coordinates and extends research and graduate training in the environmental aspects of Atomic energy. Detailed information on the research programs in various fields is given in the Graduate School Bulletin.

For housing facilities see the Graduate School Bulletin.

FELLOWSHIPS, ASSIGNMENTS, AND SCHOLARSHIPS

A wide variety of support for graduate students is available in the form of fellowships, graduate assistantships, teaching, assistantships, and research assistantships. The Graduate School is approved to offer National Defense Graduate Fellowships, National Science Foundation Graduate Traineeships, and National Aeronautics and Space Administration Traineeships.

Application blanks and further information may be obtained from the Dean of the Graduate School. Applications for financial assistance must be filed by February 15.

Information on Admission

Graduates of any institution accredited by the proper regional accrediting association are eligible to apply for admission to the Graduate School. An applicant should have ranked in the upper half of his undergraduate class and should have completed the equivalent of an undergraduate major in the field in which he proposes to study. Application forms may be obtained from the Graduate School, The University of Georgia. Each applicant for admission must submit, with his formal application, two copies of official transcripts from all colleges and universities attended, including The University of Georgia*, and official test scores on an entrance test. There is no application fee.

Applications and supporting credentials should be received in the Graduate School no later than the following dates:

For	By
Fall Quarter	August 18
Winter Quarter	December 1
Spring Quarter	February 23
Summer Quarter	May 17

A student may not register unless he has been notified by the University Admissions Office and the Graduate School that he has been admitted. All students must be admitted prior to the registration period. Materials submitted in support of an application will not be returned.

Each completed application with supporting materials is referred to the department in which the applicant proposes to study, where it is considered by the faculty of that department. Final consideration is given by the Dean of the Graduate School.

*There is no charge for issuing transcripts of The University of Georgia graduates to the Graduate School of The University of Georgia.

ENTRANCE TEST

The Aptitude Test of the Graduate Record Examination is an acceptable entrance test for all applicants. Applicants for advanced programs in Education may offer scores on the National Teacher Examination Common in lieu of the Graduate Record Examination. A foreign national whose native language is not English and who has not earned a degree in an American institution may defer the test until he is in residence. No domestic student can be accepted to the Graduate School until a satisfactory entrance test score is furnished.

The Graduate Record and National Teacher Examinations are offered several times a year at numerous testing centers in the United States and abroad. Advance registration is required, usually no later than three weeks prior to the date the examination is administered. Registration forms and detailed information on the availability and character of each examination may be obtained by writing to the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey 08540.

ADDITIONAL INFORMATION

Correspondence about admission should be addressed to the Graduate School, University of Georgia, Athens, Georgia 30601. Inquiries about facilities for advanced studies and research, programs of study and specific departmental requirements should be addressed to the person listed at the beginning of the departmental course offerings.

STUDENTS FROM ABROAD

Since several months may be required for securing needed information and for processing an application from abroad, foreign nationals are urged to submit complete information as early as possible. This information should include his application, complete academic record, and a statement concerning his financial resources. Recommendations from teachers who are familiar with higher education programs in the United States are advantageous. Evidence of an adequate command of English is also helpful. The application of a student from abroad must be complete with supporting materials and in the Graduate School Office no later than 8 weeks prior to the quarter for which admission is desired.

CLASSIFICATION OF GRADUATE STUDENTS

Only those students who are formally admitted to graduate standing will be eligible to register in the Graduate School.

Students may be admitted to the Graduate School under any one of the following classifications:

1. Prospective Candidate for a Degree. A student who meets all the requirements for admission to a degree program and who has been recommended by the department in which he proposes to study is admitted as a prospective candidate for that degree.

2. Non-Degree Candidate. A student who meets requirements for admission to graduate study may take graduate courses without becoming a candidate for a degree. An applicant who holds a master's degree from an accredited institution may be admitted as a non-degree only student by submitting an application supported only by a transcript showing the master's degree.

3. Graduate Transient admission is granted to a student in good standing in any recognized graduate school who wishes to enroll in the Graduate School for any one quarter or summer session. He will not be required to submit a full transcript of credits, but in order to be admitted, he must submit at least thirty days prior to registration an application and certification of his graduate standing in another institution. A special form for this purpose is available from the Graduate School, University of Georgia. Later, if he wishes to enroll as a regular student, he must apply in the usual way.

4. Unclassified Post-Graduate. Graduates of non-accredited colleges may be admitted to the University as unclassified post-graduates and may be admitted later to full graduate standing on the basis of performance and departmental recommendation.

IRREGULAR STUDENTS

Graduates who have been denied admission to the Graduate School, if registered in the University, will be registered through the undergraduate school or college of their choice and classified as irregular students. No irregular student will be permitted to register for graduate courses, and no work taken by a student while under this classification may be counted for credit toward any graduate degree.

Should the work of the irregular student prove to be of such quality as to justify his admission to graduate status, reconsideration may be given to his application for admission at any time after he has completed a minimum of fifteen quarter hours of approved course work in classes on the campus and has taken the aptitude test of the Graduate Record Examination.

READMISSION AND REAPPLICATION

In the event an applicant does not register for the quarter for which he is admitted, he should inform the Graduate School of his plans and request a new date of admission, if desired. Otherwise, the original admission will be cancelled, the applicant's file will be discontinued, and a new application will be required for admission at a later date.

Any student who has previously enrolled in graduate study on campus and who has not been in attendance during the previous quarter should secure an application for readmission from the Graduate School or the Admissions Office. At least three weeks prior to the first day of registration of the quarter in which the student expects to resume his studies, this form should be completed and submitted to the Graduate School with an official transcript of any additional work taken since last attending the University of Georgia.

SECOND GRADUATE PROGRAM

A student who has completed one graduate degree program at the University of Georgia must apply to the Graduate School for admission to any second degree program. The approval of the department concerned and the Graduate School must be secured before the student undertakes a second graduate program. Work taken without such approval may not be part of a program for an advanced degree.

Degrees Offered

The Graduate School is charged with dual responsibilities. In the first place, it promotes thorough, creative scholarship which is independent in character and fundamental in approach. It also provides advanced training in the various professional fields.

To accomplish these two functions, the work of the Graduate School is organized under two divisions— a Division of Advanced General Study and a Division of Advanced Professional Study. The degrees awarded are classified as Advanced General Degrees and Advanced Professional Degrees.

The degrees offered are listed below. For specific requirements see the Graduate School Bulletin.

A. ADVANCED GENERAL DEGREES

Master of Arts. The degree of Master of Arts will be conferred upon candidates who have met the prescribed requirements for this degree with major study in one of the following fields: Business Administration, Economics, Education, Fine Arts, Geography, History, Journalism, Languages and Literature, Mathematics, Mathematical Statistics, Philosophy, Political Science, and Sociology.

Master of Science. The degree of Master of Science will be conferred upon candidates who have met the prescribed requirements for this degree with major study in one of the following fields: Agricultural Economics, Agricultural Engineering, Agronomy, Animal Science, Biochemistry, Botany, Chemistry, Dairy Science, Entomology, Food Science, Forestry, Geology, Home Economics, Horticulture, Medical Microbiology, Microbiology, Pharmacy, Physics, Plant Pathology and Plant Genetics, Poultry, Psychology, Statistics, Veterinary Pathology, Veterinary Medical Physiology and Pharmacology, and Zoology.

Doctor of Philosophy. The University has established this degree for the purpose of providing properly qualified students with the opportunity to pursue research and other scholarly activity beyond the point that is possible in programs for the master's degree. At present, opportunity for such advanced graduate work is provided in Agronomy, Animal Nutrition, Animal Sciences, Biochemistry, Botany, Business Administration, Chemistry, Comparative Literature, Economics, Educational Psychology, English, Entomology, Food Science and Dairy Manufactures, Forestry, Geography, Geology, History, Mathematics, Microbiology, Pharmacy, Philosophy, Physics, Plant Pathology and Plant Genetics, Plant Sciences, Political Science, Poultry, Psychology, Romance Languages, Sociology, Statistics, and Zoology. An applicant who is looking forward to work at this level should communicate with the Dean of the Graduate School in advance with reference to the possibility of pursuing work in the field of his choice.

This degree will not be granted upon the completion of any definite amount of work prescribed in advance. It will be granted in recognition of proficiency in research, breadth and soundness of scholarship, and thorough acquaintance with a specific field of knowledge. Evidence of such attainment must be provided through the presentation of an acceptable thesis based upon independent research and through the satisfactory passing of such written and oral examinations as may be prescribed.

B. ADVANCED PROFESSIONAL DEGREES

1. The degrees of Master of Accountancy and Master of Business Administration are administered by the Graduate School of Business Administration.
Master of Business Administration. This program is designed for the student who desires sound training beyond the bachelor's degree, as preparation for a career in business. Any approved baccalaureate degree may be accepted as the prerequisite for the program.

Master of Accountancy. This degree is designed to prepare students for professional careers in public accounting or for executive positions in private accounting. It is open to students who hold a Bachelor of Business Administration degree or its equivalent.

2. The degrees below are administered by the Division of Advanced Professional Study.

Master of Agricultural Extension. This degree is designed especially for county agricultural extension workers. In addition to the general Graduate School requirements, one year of field experience in agricultural extension, or its equivalent, is required for admission.

Master of Art Education. This program is designed to improve the professional competency of teachers and supervisors of art.

Master of Education. This degree is designed for the students whose vocational objectives call for a background of professional training rather than experience in research. A student who contemplates becoming a candidate for this degree should seek the advice of the Chairman of the Division of Graduate Studies of the College of Education as to the program he should follow.

Master of Fine Arts. This program is for students in the creative and performing arts whose vocational objectives require advanced skills.

Master of Forestry. This program is designed for students who seek professional education in forestry rather than experience in scientific research.

Master of Home Economics. This program prepares students for professional service in Home Economics.

Master of Landscape Architecture. This program provides advanced training for landscape architects and graduates in related fields.

Master of Music Education. This program prepares students for professional careers in teaching or supervising public school music.

Master of Public Administration. This program provides advanced professional training for graduates who plan to work in public administration.

Master of Social Work. This program emphasizes both clinical social work practice and community social policy.

Doctor of Education. This degree provides advanced professional training for careers in teaching, administration, and other educational services. At the present time, the degree is offered in the following fields of education: Administration, Art Education, Business Administration, Educational Philosophy, Educational Psychology, Elementary Education, Mathematics Education, Music Education, Reading, Research Design, Student Personnel

Service, Social Science Education, Supervision, and Special Education. Specialization in research training and in subject fields appropriate to elementary, secondary, and college teaching is provided.

PROGRAM FOR TEACHER CERTIFICATION

A. For Majors in Education:

The Georgia State Board of Education is the agency which awards professional certificates. The College of Education has been approved to offer graduate programs designed to qualify students for fifth-year professional certificates and sixth-year professional certificates.

For other details and requirements see the Graduate School Bulletin.

B. For Majors in Fields other than Education

Candidates for degrees in fields other than education may meet the requirements for a teaching certificate at the five-year level. For requirements see the Graduate School Bulletin.

NOTES

A black and white photograph of a man in a trench coat standing in a hallway, talking to two young men. The man on the left is looking towards the two young men. The young man in the foreground is seen from the side, looking towards the man in the trench coat. The young man behind him is also looking in the same direction. The hallway has a high ceiling and large windows in the background. The text "The School of Social Work" is overlaid in the center of the image.

The School of
Social Work

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The School of Social Work

CHARLES A. STEWART, B.S., M.A., M.S.S.W., Ph.D., Dean

General Information

The School of Social Work began operation in September of 1964, offering a six quarter graduate program leading to the Master of Social Work degree. It is accredited by the Council on Social Work Education.

ORGANIZATION

The School of Social Work is a professional graduate school for those already holding a bachelor's degree in any field. However, by special arrangement with the dean and faculty, certain summer courses or weekend extension courses in Social Work are available for:

1. Professional people such as welfare workers or teachers who may or may not have a bachelor's degree but merely wish to upgrade their professional knowledge,
2. Undergraduates in other fields or those who plan to pursue a M.S.W. after obtaining their bachelor's degree.

PURPOSE

The specific educational aims of the Master's program, consisting of a graduated series of studies involving both class and field instruction are:

1. To assure the student's acquisition of skill in one of the component methods of social work (casework, group work, community organization, administration, or research) and understanding of the nature and the applications of the other methods;
2. To provide the student with a theoretical foundation upon which he can build an understanding of human behavior in all its subtle variety, and in its psychological, social, and cultural dimensions; and, further, to enable him, through the disciplined use of self, to employ this understanding as a professional person;
3. To establish a firm conceptual basis for the student's understanding of the structure and dynamics of the social welfare system in this country, with emphasis on its economic and political dimensions, so that he may develop a deep commitment to social action toward alleviating human need;
4. To stimulate the student to examine his own attitudes and values so that, in the light of knowledge and understanding, he may achieve a comfortable identification with social work and a genuine adherence to professional ethics.

SOCIAL WORK AS A PROFESSION

Social work is one of the professions that operates within social welfare. Methods in social work involve the use of self in a relationship designed to enhance the social

functioning of clients. Satisfactory completion of the curriculum of this graduate program provides the student with knowledge and skills necessary for beginning professional application. Because of a marked shortage of qualified social workers, graduates are in considerable demand and have extensive choice in selecting employment in a field of interest. Fields include: juvenile delinquency, mental health, hospitals, homes for unwed mothers, child welfare agencies, schools, retardation, recreation and community organization.

FACILITIES

The School of Social Work is located in Candler Hall on North Campus. Extensive University resources enrich the curriculum of the School of Social Work. Research facilities include the machines and human resources of the Computer Center and the Social Science Research Institute.

The Institutes of Community and Area Development, Government, and Higher Education are important adjuncts to the School of Social Work. In addition, many of the University doctoral programs, including sociology, psychology, economics, political science, education, philosophy, and business administration, are related to social work.

DEGREE OFFERED

The School of Social Work offers the degree of Master of Social Work.

FIELD INSTRUCTION

Supervised field instruction in off-campus agencies is required in two settings. Some of the agencies used include: child welfare, mental health, correction, public assistance, family service, medical services, school social work, vocational rehabilitation, recreation services, housing, and gerontological services.

FINANCIAL AID

The University provides several graduate assistantships in amounts up to \$2200 for nine month appointments. Twenty eight federal traineeships are also administered by the school. In addition, public and voluntary agencies offer students up to the amount of \$4900, plus tuition and fees, with a related commitment of obligated service at a higher salary following graduation. For further information write the Dean of the School of Social Work.

Admission Requirements

In addition to the Graduate School requirements of a bachelor's degree and demonstrated potential for graduate study as indicated by aptitude scores and undergraduate scholarship, the School of Social Work assesses applicants' potential in the following areas: oral and written communication skills, interpersonal competence and toleration for frustration and stress, relative freedom from prejudice, self awareness and sensitivity to the needs of others, and motivation to assist others in problem-solving efforts. An interview with a faculty member or designated social worker is a necessary pre-admission procedure.

Successful graduate performance in social work is accomplished by students

with varied academic backgrounds, but a concentration of undergraduate courses in the behavioral sciences and humanities is of value. Supervised experience as a sub-professional social worker in a social agency enhances capabilities for graduate study in many cases.

Degree Requirements

HOURS

A total of 90 credit hours is required for the M.S.W. degree.

TRANSFER STUDENTS

A student may transfer credits up to one year taken from accredited school of social work subject to the Dean's approval.

ACADEMIC WORK LOAD

The normal academic work load is 15 quarter hours.

CLASSIFICATION OF COURSES

Courses numbered 800-900 are for graduate students only, candidates for the M.S.W. degree. For all graduate social work courses in the 600-700 series, there are undergraduate courses with corresponding numbers in the 400-500 series. For example, Social Work 641 is offered on the undergraduate level as Social Work 441.

Required Curriculum

QUARTER I

	<i>Hours</i>
800. Professional Responsibility in Social Work	1
803. Social Welfare Policy and Services I	2
831. Logic of Professional Judgments in Social Work	1
841. Human Behavior and the Social Environment I	4
941. Social Work Methods I	4
901. Field Instruction I	3

QUARTER II

902. Field Instruction II	10
801. Seminar in Social Policy	1
842. Human Behavior and the Social Environment II	2
942. Social Work Methods II	2
832. Social Work Research Practicum	1

QUARTER III

801. Seminar in Social Policy	1
804. Social Welfare Policy and Services II	2
832. Social Work Research Practicum	1
843. Human Behavior and the Social Environment III	2

943. Social Work Methods III	3
Elective(s)	up to 6

QUARTER IV

844. Human Behavior and the Social Environment IV	2
801. Seminar in Social Policy	1
832. Social Work Research Practicum	1
— Methods Seminar I	3
903. Field Instruction III	8

QUARTER V

904. Field Instruction IV	15
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QUARTER VI

801. Seminar in Social Policy	1
845. Human Behavior and the Social Environment V	3
930. Thesis in Social Work	2
Methods Seminar II	3
Elective(s)	up to 6

AREAS OF CONCENTRATION

General instruction is provided in three general areas: human behavior and the social environment, social welfare policy and services, and methods of practice. A student may concentrate his studies by using his electives in one of three areas: casework, group work, or community organization. His field instruction is also in the desired area of concentration.

Course offerings are listed in the course description section of the General Catalog, the Graduate School Bulletin, and in a special bulletin put out by the School of Social Work. For additional information, write the Dean of the School of Social Work, University of Georgia, Athens, Georgia 30601.

A black and white photograph of a classroom. In the background, a teacher stands near a whiteboard. Several young children are in the foreground and middle ground, some standing and some sitting at desks. The text "Special Services and Facilities of the University" is overlaid in the center of the image.

Special Services
and Facilities
of the University

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Special Services and Facilities of the University

Special services and facilities of the University of Georgia include community education services, various institutes, the Georgia Center for Continuing Education, the University Press, Athletic Association and Alumni Society. Particular institutes are listed under the various schools and colleges.

Services and Institutes

The Vice President for Services is responsible for the direction and coordination of all public service programs of the University. Requests for information on programs in this section may be directed to him, unless otherwise noted.

INSTITUTE OF COMMUNITY AND AREA DEVELOPMENT

This Institute makes the total resources of the University available to state, area and local organizations confronted by problems of community and area growth, adjustment and development. Specialists from a large number of fields—economics, business, geology landscape development, community organization, safety education, sociology, recreation, social work, government, etc.—frequently work together as a problem-solving team. Their activities include research and special studies; provision of factual information; help in community program planning; assistance in conducting leadership seminars, forums and other educational meetings.

Personnel involved are primarily University faculty, staff, and graduate students. These activities frequently involve contractual arrangements between the University and the local organization.

INSTITUTE OF GOVERNMENT

The Institute of Government functions to achieve better government for the people of Georgia through a program of research, training and services.

A comprehensive research program is conducted in government, public administration, public law, the political process, public finance, police science and law enforcement, and probation and parole. The Institute publishes appropriate books and monographs, including handbooks for local and state government officials. Educational programs are held for governmental officials, including law enforcement personnel and probation and parole officials.

The Institute cooperates with the Institute of Community and Area Development, particularly in field research. It also offers research and consultation services to government officials, helps government in filling vacant positions and provides a speaker service to organizations.

Institute of Government personnel serve jointly with the Institute of Community and Area Development, the Georgia Center for Continuing Education, the Departments of Political Science and Sociology in the College of Arts and Sciences, the

Department of Management in the College of Business Administration, and the School of Social Work.

The Institute works closely with the Political Science Department to train graduate students in public administration. Research assistantships in the Institute of Government are awarded to graduate students each year.

The Georgia Center for Continuing Education

The Georgia Center for Continuing Education seeks to fill the need for continuing education for Georgia citizens regardless of their previous contact with institutions of higher education. One of the major functions of the University is to offer credit and non-credit programs on campus and throughout the state. The Georgia Center for Continuing Education is the administrative unit through which most of the non-agricultural service programs are directed. It draws on the full resources of the University, working closely with the faculty and participating groups to evaluate its various programs and design new services. The Center is headed by a Director who supervises the over-all operation, with associate directors for the major divisions of Instructional Services, Communications Services, and Managerial Services.

The Georgia Center building on campus provides, in addition to administrative offices for the program, living quarters and conference rooms for approximately 300 adults, as well as studios and workrooms for the University's educational television-WGTV, Channel 8.

Conference and Institutes

The colleges and schools of the University arrange conferences, seminars, and institutes for adults who wish to continue their education by keeping informed about the latest developments in their respective fields of interest and investigation. These continuing education activities are usually co-sponsored by professional, business, industrial, governmental or social organizations. Members of the University faculty and outside specialists offer instruction by lectures, discussions, demonstrations, case studies, and field trips. Regular announcements regarding programs in continuing education conducted at the Center are made through news media and mailings.

The University, through the Center for Continuing Education, cooperates with organizations or groups in planning, executing and evaluating a conference or institute which will fill a worthwhile need. Those interested in inquiring about these services should contact the Georgia Center for Continuing Education, The University of Georgia, Athens, Georgia 30601.

University Centers and Extension Classes

As an extension of its regular credit program the University operates centers in Macon, Rome, Thomasville, Warner Robins and Waycross. Extension classes are offered wherever as many as 20 students desire a particular course. Regular college credit courses taught by approved instructors are offered at these off-campus locations, as well as special non-credit programs tailored to the needs of the people of the area.

Regular academic subjects are scheduled quarterly, primarily during evening hours. Entrance requirements and course content are identical with the standards

that apply on the campus. The faculty is approved by the department concerned and by the Dean of Faculties. Students satisfactorily completing these classes receive credit on transcripts issued by the University Registrar.

Fees for all continuing education credit programs are based on a rate of \$8 per quarter hour. Since most of the classes are scheduled for five quarter hours each the usual fee is \$40 per course. A registration fee of \$1 per academic quarter is charged all students in the centers.

Special certificate courses have been authorized in general business and in accounting. Students may elect the courses in these two sequences for two-year terminal programs, omitting some of the normal requirements of the freshman and sophomore years in the usual baccalaureate program.

In Athens both credit and non-credit sessions are scheduled quarterly. The credit program is conducted under University academic regulations; the non-credit program—The Community Program—meets in the Center building, offering informal discussion of timely subjects. Quarterly bulletins on all these programs are available on request.

Home Study

The center also conducts an extensive individual study program, including undergraduate college courses and supervised high school study. Each course is conducted by a college faculty specialist in the subject. Home Study also directs reading programs and the Recording for the Blind service. Adults who are interested in continuing their studies may consult Home Study for advice and referral. A Home Study bulletin is available on request.

Special Services

Many special programs such as Civil Defense Education, Drama Loan Library, Traveling Art and United Nations Information are also directed by the Georgia Center.

Communications Services

The Division of Communications has the basic responsibility for supporting the conference programs at the Georgia Center for Continuing Education through audio-visual and other instructional resources such as the University Film Library, the University Film Production Center, and the University's educational television station, WGTV.

WGTV is also the base station for the operation of GEORGIA TELEVISION, a program service made available to the educational television stations in Savannah, Waycross, Columbus, and Augusta, which are owned and operated by the State Department of Education.

WGTV makes day-time hours available for instructional television to the public schools.

The Communications Division produces films and television programs for regional and national distribution. Through the combined efforts of its various departments, the Communications Division has created a unique stage production known as the docudrama, which is produced at the commission of many conference groups.

Managerial Services

Managerial Services is responsible for the business management of the center and its statewide services.

Budgeting, purchasing, food and facility management, and personnel are all given special attention within the larger management policies of the University.

GEORGIA COMMUNITY CONTINUING EDUCATION SERVICE

The University of Georgia has been designated as the State Agency for the planning and administration of Title I of the Higher Education Act of 1965—Community Service and Continuing Education: the approved state plan through which all eligible higher education institutions in Georgia, both public and private, can qualify for Federal financial assistance in the development and offering of adult educational programs, directed toward the solution of community problems.

Other University Activities

INSTITUTE OF HIGHER EDUCATION

This Institute serves as the institutional research facility for the University and assists in statewide studies of higher education. The Institute promotes studies in and provides services for other colleges and universities, public and private, and assists individuals who are preparing for college teaching or institutional research.

COUNCIL ON GERONTOLOGY

The Council on Gerontology is charged with responsibility for developing a program of instruction, training, and research related to the study of aging processes in the biological, social, and behavioral sciences, and the application of knowledge to practice.

The principal operating arm of the Council is a Coordinating Committee composed of members of the faculty having a close working relationship with the University Gerontology Program. The following fields are currently represented; sociology, psychology, social work, business administration, physiology, home economics, and continuing education.

At the undergraduate level students may develop a concentration in gerontology by electing courses from related subject matter areas. The objectives here are to acquire an adequate base for graduate study, to learn about gerontology as an occupational area, and to become gerontologically oriented for community leadership.

At the graduate level students may elect from related subject areas a concentration in gerontology in the established degree programs. The objectives here are to prepare for college teaching in the gerontological aspects of the established disciplines, to prepare for professional research in gerontology, to prepare for professional leadership positions in planning and operating community service programs for older adults, and to acquire a gerontological orientation to other professional fields.

THE UNIVERSITY OF GEORGIA PRESS

The University of Georgia Press seeks to advance learning by publishing books that contribute to a better understanding of human affairs. It provides facilities for the publication of creative literary and scientific work by University professors and scholars throughout the nation.

For further information, or a list of publications by the Press, contact the Director of the University of Georgia Press, Athens, Georgia 30601.

ATHLETIC ASSOCIATION

The University of Georgia conducts a complete program of intercollegiate athletics. The University is a member of the Southeastern Athletic Conference and abides strictly by the regulations and policies of the conference. Although the University faculty has general control of internal policies of the University relating to all phases of intercollegiate athletics, the University of Georgia Athletic Association has been created to facilitate the handling of the business and financial side of the intercollegiate program. The President of the University is ex-officio chairman of the Board of Directors and a majority of the members of the board are faculty members. The other members of the board are alumni and friends of the University. The funds of the Athletic Association are subject to the control of the Board of Regents.

ALUMNI SOCIETY

The University of Georgia Alumni Society maintains an active program for alumni contact and interest in the University. All persons who at any time were matriculated as regular students in the University at Athens are eligible for membership. Members who contribute annually to the Alumni Fund may vote on Society business, are eligible for election to an office, and will receive the magazine *Alumni Record*. Non-alumni parents and friends are welcomed as associate members. Students are invited to visit the Alumni Office in the Academic Building for further information. Alumni Society funds are listed in the Financial Aids booklet.

THE UNIVERSITY OF GEORGIA FOUNDATION

The University of Georgia Foundation was organized in 1937 under the sponsorship of the Alumni Society and its officers. The Foundation is a corporation under the laws of the State of Georgia and has a self-perpetuating Board of Trustees, consisting of forty-nine alumni. In addition, there are nine trustees emeritus.

The purposes of the Foundation are: to develop the facilities of the University, to strengthen its financial resources by encouraging gifts to the University, and to receive, hold, and administer such gifts in accordance with the instructions of the donors. The Foundation is particularly interested in receiving donations and requests to meet University needs other than those which are adequately met by state appropriations.

Various funds have been established for specific educational purposes and for scholarships by individuals, businesses, and organizations. These are listed in the Financial Aids booklet.

Information regarding the foundation may be obtained from Mr. Inman Brandon, President, University of Georgia Foundation, Sixth Floor, First National Bank Building, Atlanta, Georgia 30303, or from the President of the University.

NOTES

Courses of Instruction

Courses of Instruction

Course descriptions for all schools and colleges of the University are listed within this section. Schools and colleges are arranged in alphabetical order; departments within each school and college are also in alphabetical order. To find a particular course, look for the school or college under which it is taught and, subsequently, the department under which it would fall. In some cases, only the number and title of a course are given with a cross reference in parenthesis. This cross referencing tells under which school or department the complete course description will be given. Courses numbered from 1 to 99 are either non-credit or remedial courses; those from 100 to 199 are designed for freshman and sophomore (junior division) students; those numbered 200 to 299 are mainly sophomore courses but, in special instances when justified by course and curricular requirements, may be given senior division (junior and senior) classification. Courses numbered 300 to 399 are offered primarily for junior and senior students; courses taken by juniors and seniors along with graduate students carry the numbers 400 to 599 for undergraduate and 600 to 799 for graduate students. Courses numbered 800 to 999 are offered only for graduate students and are listed by title only. For full course description, see the Graduate School Bulletin.

Following is a list of regulations governing all courses:

1. The University reserves the right to withdraw any course for which the registration is not sufficient, and to offer courses not here listed, if sufficient demand arises and if teaching facilities and personnel are available.
2. Unless otherwise indicated, all courses will meet five times a week and carry five hours credit.
3. Students are held responsible for breakage of equipment in all laboratory courses.

College of Agriculture

SPECIAL COURSES

Orientation Courses for College of Agriculture Freshmen

101. (AGRICULTURE) ORIENTATION. 1 hour.

A course designed to aid agricultural freshmen adjust to college life and to better understand the occupational opportunities available to graduates. The functions of the total university, use of libraries, study procedures, organization and functions of the college, state and federal agricultural agencies, personality development, social behavior, student activities, planning a program of study and career opportunities are discussed.

Cooperative Course Among Units of the University System

400. FIELD BIOLOGY. Prereq: 25 hours in the biological sciences with at least 5 hours in plant science and 5 hours in animal science; geology recommended. Offered in the summer at the Field Biology Station at Rock Eagle. The study of representative terrestrial and aquatic flora and fauna and the interplay with their environments. Wild and domesticated plant and animal populations will be included. Field trips made to study the ecology of the Georgia coast, swamps and mountains.

Cooperative Graduate Course Among Departments in College of Agriculture

830. RADIATION PRINCIPLES. Prereq: Chemistry 651, Botany 380, or Poultry Science 401 or Physics 228. Two lectures and two 3-hour laboratories. Principles and techniques of radiochemistry and radiobiology.

Agricultural Economics (AEC)

104. FARM RECORDS AND ACCOUNTS. 3 hours.

A study of the principles, techniques and systems involved in farm records and accounts.

110. RURAL ECONOMICS. 3 hours.

Introduction to economics of farming, student orientation to entire field of agricultural economics, application of economics to farm problems.

301. FARM ORGANIZATION AND MANAGEMENT. Three lectures and two laboratory periods. Prereq: Agricultural Economics 104 and 110, Agronomy 101, Animal Science 101, and Mathematics 100.

A scientific approach to the study of individual farm programs for the purpose of determining methods to be used for increasing farm income.

304. **ECONOMICS OF AGRICULTURAL MARKETING.** Prereq: Agricultural Economics 110.

A general course in marketing farm products describing and analyzing marketing functions and market agencies. General purpose to enable students to have a comprehensive understanding of the principles of agricultural marketing.

310. **APPLIED ECONOMICS OF AGRICULTURE.** Prereq: Agricultural Economics 110, or equivalent, and Mathematics 100.

The principles of economics as applied to production, distribution, prices, credit, taxation, demand, supply and comparative advantage.

340. **AGRICULTURAL POLICY.** Prereq: Agricultural Economics 110.

An analysis of agricultural policy as formulated by Federal and State Governments including the objectives, procedures and effects of adopted and proposed agricultural programs.

351. **AGRICULTURAL CREDIT.** Prereq: Agricultural Economics 110, Mathematics 100 and Political Science 101.

Principles of finance applied to farm credit organizations. Practices and principles of financing individual farms.

364. **LAND ECONOMICS.** Prereq: Agricultural Economics 110, Agronomy 210 and Political Science 101.

An appraisal of the agricultural use of land in the United States. Designed to meet current needs for training in application of economics to use of land by farmers under changing political and social conditions.

400. **COOPERATION IN AGRICULTURE.** Prereq: Agricultural Economics 304 and 310 or equivalent.

A study of cooperative marketing associations, their organization, and practices. A discussion of philosophy and economics of cooperation in agriculture.

401. **(AGRICULTURAL EXTENSION) RURAL ORGANIZATIONS.** Prereq: Agricultural Economics 110, Political Science 101, and two senior division courses in economics or agricultural economics.

History of agricultural organizations; study of selected rural agencies and organizations; and a study of the relationship between organizations of rural people and their economic well being.

402. **ADVANCED FARM ORGANIZATION AND MANAGEMENT.** Five lectures (with a few special field trips per quarter). Prereq: Agricultural Economics 301 and 364 or equivalent, Agronomy 321 or equivalent and Animal Science 373.

Analysis of economic facts of individual farm plans and formation of economic models which postulate optimum allocation of land, labor and capital as guides for increased revenue.

403. **MARKETING LIVESTOCK AND LIVESTOCK PRODUCTS.** Prereq: Agricultural Economics 110, or equivalent, and one course in livestock production or consent of instructor.

An economic study of livestock marketing with emphasis on channels of trade and methods of distribution, prices, standardization, transportation, regulation

and supervision and the way in which marketing functions and agencies implement the marketing of livestock.

408. **ECONOMICS OF AGRICULTURAL LABOR UTILIZATION.** Prereq: Agricultural Economics 110, 301, and 304 or equivalent and consent of the instructor. Work simplification and other aspects of operational efficiency for farms and agricultural marketing firms including the principles and techniques for improving layout, materials handling, work methods, job instruction, working conditions, crew organization and management.
421. **AGRICULTURAL ADJUSTMENTS AND RESOURCE DEVELOPMENT.** Prereq: Agricultural Economics 110 or equivalent and two senior division courses in agricultural economics or economics. The application of fundamental economic principles in determining efficient adjustments in agricultural resource use consistent with economic growth, and changing technology and economic conditions.
458. **INTERMEDIATE ECONOMIC PRINCIPLES.** Prereq: Agricultural Economics 310, Mathematics 100, Economics 312 or equivalent and senior standing. The principles of competitive and imperfect markets in the allocation of consumer goods and inputs of factors of production in a stable, free enterprise economy.
467. **AGRICULTURAL PRICES.** Prereq: Agricultural Economics 110 and two senior division courses in economic or agricultural economics. An analysis of the principles of cause and effect of price fluctuations, the development of theoretical concepts as tools of analysis in dealing with price problems, including use of index numbers and multiple correlation.
469. **AGRICULTURAL FINANCE.** Prereq: Agricultural Economics 110, two senior division courses in economics or agricultural economics, and consent of the instructor. A study of financial problems of agricultural businesses including budgetary analysis of financial requirements; financial statements; sources, costs and management of funds; risk reduction.
471. **RESOURCE ANALYSIS OF AGRICULTURAL BUSINESSES.** Prereq: Agricultural Economics 304 and 310 or equivalent and consent of instructor. The relationship of inputs and outputs between agriculture and agricultural businesses; analysis of factors affecting development and economic growth in developing areas.
480. **WATER RESOURCE ECONOMICS.** Prereq: Agricultural Economics 304 and 310. A study of the economic aspects of the use, supply, development and management of water resources; includes problems of agricultural, industrial, domestic and interdependent water demands, supplies, and quality control.
502. **MANAGEMENT IN AGRICULTURE.** Prereq: Agricultural Economics 301 and 310. A study of the principles used in making management decisions and the application of these principles in agriculture.
808. **AGRICULTURAL ECONOMICS, THEORIES AND PROGRAMS**
809. **ADVANCED AGRICULTURAL PRICE ANALYSIS**
821. **AGRICULTURAL PROGRAMS AND POLICY**

830. AGRICULTURAL ECONOMICS RESEARCH

831.

930. THESIS

Courses in the College of Education with Major in Agricultural Education (EAG)

304. EDUCATIONAL PSYCHOLOGY.

Application of psychology to problems of child growth and development, learning, motivation, measurements, personality adjustment and mental hygiene, and individual differences.

335. CURRICULUM PLANNING. Prereq: EPY 304 or 305 and consent of instructor.

Determining curriculum content and planning instructional programs in vocational agriculture for high school and adult groups based upon their needs and interests. Directed observation in selected schools.

336. TEACHING PROCEDURES. Prereq: EPY 304 or 305, EAG 335 and consent of instructor.

Study and evaluation of teaching procedures and techniques which might be used in teaching vocational agriculture to high school and adult groups. Directed observation and planning for apprentice teaching.

346, 347. STUDENT TEACHING. 15 hours. Prereq: EPY 304 or 305, EAG 335 and 336.

348. Prospective teachers of vocational agriculture are placed as apprentices in carefully selected schools of the state for an entire quarter. During this period they are carefully supervised in dealing with the problems of teaching vocational agriculture.

349. SEMINAR IN EDUCATION. 3 hours. Prereq: Student teaching.

A seminar dealing with problems emerging from experiences in apprentice teaching. Emphasis will be placed upon the planning of school programs and the place and responsibility of the teacher in the school.

Vocational Education (EVO)

900. CURRICULUM PLANNING IN VOCATIONAL EDUCATION

901. TEACHING PROCEDURES IN VOCATIONAL EDUCATION

902. EVALUATION IN VOCATIONAL EDUCATION

903. SUPERVISION OF VOCATIONAL TEACHING

904. PROBLEMS IN VOCATIONAL EDUCATION

907. ADULT EDUCATION

965. LABORATORY IN APPLIED EDUCATION

Agricultural Extension (AET)

313. AGRICULTURAL EXTENSION ORGANIZATION AND PROCEDURES. Prereq: Two or more senior division courses.

Philosophy, procedures, and practices of Extension Service work in agriculture

and home economics; organization, administration, and financing; relationships with cooperating and related organizations and agencies; qualifications, duties, and responsibilities of Extension Service workers.

314. AGRICULTURAL EXTENSION SERVICE PROGRAMS. Prereq: Agricultural Extension 313.

Scope and nature of Extension Service programs at national, state, and county levels; emphasis upon techniques, policies, and procedures for developing Extension Service programs as basis for work of county agents and county extension home economists; activities involved in carrying out programs; evaluation of efforts and results obtained.

401. (AGRICULTURAL ECONOMICS) RURAL ORGANIZATIONS. Prereq: Agricultural Economics 110, Political Science 101, and two senior division courses in agricultural economics or economics.

History of agricultural organizations; study of selected rural agencies and organizations; and a study of the relationship between organizations of rural people and their economic well being.

501. PUBLIC RELATIONS IN EXTENSION WORK. 3 hours.

The role of public relations in educational and governmental institutions: development of a public relations program for Cooperative Extension Work: Enumerating and describing the specific "Publics" to which the institution has responsibility.

502. FAMILY PROBLEMS IN LIVING AND FINANCIAL MANAGEMENT. 2 hours.

A study of the economy in which the American family lives; incomes, expenditures, security savings; legal facts relating to financial planning; improvement of money management in the home.

503. EFFECTIVE USE OF INFORMATION MEDIA IN EXTENSION WORK. 2 hours.

An analysis and application of the principles of human behavior that have a directed bearing on extension instruction. Consideration is given to relevant contribution from the fields of educational, industrial, business and social psychology.

504. PRINCIPLES AND PROCEDURES IN THE DEVELOPMENT OF 4-H CLUB WORK. 3 hours.

The principles and procedures in planning and conducting 4-H Club programs and activities; selecting projects; selecting, training, and using volunteer leaders; working with and through organizations.

505. COMMUNICATION IN EXTENSION WORK. 2 hours.

The use of communications media in Extension work with special emphasis on radio and television.

506. ADMINISTRATION AND SUPERVISION IN EXTENSION. 3 hours.

The principles of administration and supervision and their application to the Cooperative Extension Service.

509. EXTENSION EVALUATION. 3 hours.

Techniques of evaluating effectiveness of programs, methods, educational activities and personnel of the Agricultural Extension Service. Emphasis is

placed on clarifying objectives, sampling procedures, analysis, interpretation, presentation and use of data.

707. PROGRAM BUILDING IN EXTENSION.

A study of the basic problems, principles and procedures involved in program development in cooperative extension work.

708. AGRICULTURAL EXTENSION ADMINISTRATION.

A seminar in the organization, administration, operation, and evaluation of the Cooperative Extension Service and its educational programs.

Agronomy (AGY)

101. FIELD CROP PRODUCTION. 3 hours.

A general survey of the principles involved in the economical production of the more commonly grown field and forage crops. Laboratory exercises will include plant and seed identification in the field and laboratory.

210. PRINCIPLES OF SOILS. Prereq: Chemistry 121-122.

Soil formation; physical, chemical, and biological properties of soils; commercial fertilizers, lime and organic matter; and soil management practices, with particular reference to cultivated soils.

321. FORAGE AND PASTURE CROPS. Prereq: Agronomy 101, 210, and Botany 122.

Study of the adaptation, requirements, and culture of the important grasses and legumes and their use as pasture, hay, silage, and soilage.

324. WEEDS AND SEEDS. Prereq: Agronomy 101, 210, and Botany 122.

Beneficial and harmful effects of weeds. Principles of weed control, including the use of chemicals and cultural practices. Seed certification, analysis, and germination. Identification of weeds in seed and plant form.

333. CROP SCIENCE. Prereq: Agronomy 101, Botany 111 or 121.

Areas to be discussed are classification of plants as to agronomic growth, method of reproduction, use, botanical origin, gene centers and developmental routes. Geographic distribution and economic use will be treated.

356. FERTILIZERS. Prereq: Agronomy 210.

Sources, manufacture, and uses of commercial fertilizers, and the principles involved in the application of fertilizers to crops. Plant nutrient deficiency symptoms and means of correcting these deficiencies.

369. (HORTICULTURE) MANAGEMENT OF TURF. Prereq: One course in botany and permission of instructor.

A study of turf grasses and growth requirements. The various operations, equipment, materials, and work program for the proper and efficient maintenance and management of turf for golf courses and other specific uses.

401. SEED TECHNOLOGY. Prereq: Agronomy 324, Chemistry 261 and Botany 380, or equivalent.

Seed and seedling structure; viability and vigor of seed; physiology of germination; dormancy; hard seeds; moisture determination; storage and longevity sampling.

423. (STATISTICS 421) PRINCIPLES OF EXPERIMENTAL METHODS. Prereq: Agronomy 321 and 356, or equivalent.
Principles and practices in plant and animal research with special reference to the design and mechanical procedure with experimental plots. The applications of statistical methods to laboratory and field results are emphasized.
425. PASTURE DEVELOPMENT AND MANAGEMENT. Prereq: Agronomy 321 and 356, or equivalent.
Fundamental principles of growth and production of pasture plants and mixtures; type of pastures and pasture vegetation; principles of establishment and management for economical production and soil conservation.
- 427 a-b-c. AGRONOMY SEMINAR. 1 hour each.
Topics relating to crops and soils to be discussed, including literature review and results pertaining to local experimental work. Required of senior students. Students and faculty to participate.
433. ADVANCED CROP PRODUCTION. Prereq: Agronomy 333.
Description of the basic principles involved in economic production of cereal, fiber, food and drug crops.
454. SOIL MORPHOLOGY AND CLASSIFICATION. Prereq: Two senior division courses in agronomy or equivalent.
Morphological characteristics of soils, factors influencing these characteristics and classification of soils of the U.S. Several full-day field trips will be required at the student's expense. (Total cost about \$25.)
458. LAND USE AND SOIL CONSERVATION. Prereq: Agronomy 321 and 356, or equivalent.
Soil management practices pertaining to efficient land use, and the application of these practices to farm planning and soil conservation.
459. SOIL FERTILITY. Prereq: Agronomy 356 and 458, or equivalent.
Soil conditions affecting availability of plant nutrients, methods of determining soil fertility and deficiency of plant nutrients in soils, and interpretation of chemical and biological measurements as related to fertility maintenance and good soil management.
460. SOIL PHYSICS. Prereq: Agronomy 454 and Chemistry 380, or equivalent.
Physical properties, moisture relations, and methods of physical analysis of soils.
461. (MICROBIOLOGY) SOIL MICROBIOLOGY. Prereq: Agronomy 458 and Microbiology 350 or equivalent.
Study of characteristics of microorganisms inhabiting the soil. Activities of soil microorganisms such as nitrogen fixation, carbon cycle, and other factors affecting soil fertility are especially stressed.
801. RESEARCH METHODS IN AGRONOMY
810. ADVANCED AGRONOMY SEMINAR
812. (PLANT GENETICS) SPECIALIZED PLANT BREEDING
821. SPECIAL PROBLEMS IN AGRONOMIC SCIENCE
- 822.
827. (STATISTICS) EXPERIMENTAL DESIGN

- 852. ADVANCED SOIL FERTILITY
- 853. METHODOLOGY IN SOIL CHEMISTRY
- 854. ADVANCED SOIL MORPHOLOGY AND GENESIS
- 860. SOIL PHYSICAL FACTORS AND PLANT GROWTH
- 930. THESIS RESEARCH IN AGRONOMY

Animal Science (AS)

- 101. INTRODUCTORY ANIMAL SCIENCE. 3 hours.
A study of basic facts, principles, and terminology pertaining to beef cattle, sheep, swine, horses and mules.
- 350. TYPES, BREEDS, CLASSES, AND GRADES OF LIVESTOCK. 3 hours.
Prereq: Animal Science 101.
A study of the characteristics of the different types, breeds, classes, and grades of livestock.
- 356.1, 1 hour each. FITTING AND SHOWING BEEF CATTLE, SHEEP, AND
356.3, SWINE, (respectively). Prereq: Animal Science 101.
356.4.
A laboratory course designed to train students in the proper fitting and showing of the various breeds and classes of beef cattle, sheep, and swine for show or sale.
- 358. (DAIRY SCIENCE, POULTRY SCIENCE) FUNDAMENTALS OF ANIMAL NUTRITION. Prereq: Chemistry 261 or 340.
A study of the fundamental principles of animal nutrition.
- 360. BEEF CATTLE PRODUCTION. Prereq: Animal Science 372, 373, or permission of instructor.
A study of the breeding, feeding, and management of beef cattle.
- 361. SWINE PRODUCTION. Prereq: Animal Science 372, 373, or permission of instructor.
A study of the breeding, feeding, and management of swine.
- 364. SHEEP PRODUCTION. Prereq: Animal Science 372, 373, or permission of instructor.
A study of the breeding, feeding, and management of sheep.
- 366. LIVESTOCK JUDGING AND SELECTION. 3 hours. Prereq: Animal Science 350 or permission of the instructor.
A course which deals with the selection of livestock for the breeding herd and for slaughter. From the students in this course will be chosen the team to represent the University in the Annual Spring Intercollegiate Livestock Judging Contests.
- 372. ANIMAL BREEDING. Prereq: Animal Science 101 and Plant Genetics 358.
A study of the basic principles of genetics and reproduction as related to the breeding and improvement of farm animals.
- 373. FEEDS AND FEEDING. Prereq: Animal Science 101 and Chemistry 261, or permission of instructor.

A study of the composition and properties of the important feed stuffs and their use in the feeding of farm livestock.

376. **ADVANCED LIVESTOCK JUDGING AND SELECTION.** 3 hours. Prereq: Animal Science 366 or permission of instructor.
A continuation of Animal Science 366. From the students in this course will be chosen the team to represent the University in the Annual Fall Intercollegiate Livestock Judging Contests.
402. **ADVANCED ANIMAL NUTRITION.** Prereq: Animal Science 358, Veterinary Physiology 310, or equivalent.
A study of the chemical composition and the physical and chemical properties of feeds and feed nutrients; the digestion, absorption and metabolism of the nutrients; factors affecting nutrient utilization; the functions of the different nutrients; the nutrient requirements of farm animals; the effects of nutrient deficiencies and how to correct and prevent them.
404. **THE GENETIC IMPROVEMENT OF FARM ANIMALS.** Prereq: Animal Science 372 or equivalent and one other senior division course in animal science or closely related field.
The development of practical and genetically sound programs involving the study and application of genetic principles underlying selection, systems of mating and performance testing.
405. **PHYSIOLOGY OF REPRODUCTION IN FARM ANIMALS.** Prereq: Animal Science 372 or equivalent, Veterinary Physiology 310, and at least one other senior division course in animal science or closely related field.
A study of the physiology of reproduction of farm animals, including the advanced aspects of the technological control of the reproductive processes.
573. **ADVANCED LIVESTOCK FEEDING.** Prereq: Animal Science 373 or permission of the instructor. Limited to candidates for advanced degrees in education or agricultural extension.
An advanced course designed to provide current information relative to recent developments in the field of animal nutrition and their impact on livestock feeding, as well as the scientific principles on which they are based.
- 801, **SPECIAL PROBLEMS IN ANIMAL SCIENCE**
802.
805. **EXPERIMENTAL METHODS IN ANIMAL NUTRITION**
806. **MINERALS AND VITAMINS IN THE NUTRITION OF FARM ANIMALS**
- 810 a-b-c. **SEMINAR IN ANIMAL SCIENCE**
826. (STATISTICS) **STATISTICAL METHODS IN ANIMAL SCIENCE**
828. (STATISTICS) **POPULATION GENETICS**
930. **THESIS**

Botany

See Botany listings under Arts and Sciences, Page 291

Dairy Science (DS)

103. **ELEMENTS OF DAIRYING.** 3 hours.
An elementary course in dairying, dealing with the following general subjects: relation of dairying to agriculture; application of the Babcock test to farm practices; care and handling of milk on the farm; milk secretion; feeding, breeding, judging, and selection of dairy cattle.
301. **DAIRY SEMINAR.** 1 hour each.
302. Topical discussion of current problems and scientific work in dairying.
- 303.
350. **DAIRY CHEMISTRY.** Prereq: Chemistry 121-122.
A basic study of the chemical and physical properties of milk; analysis of milk and milk products according to standard methods; functions and operations of a dairy control laboratory.
- 356.5. **DAIRY CATTLE FITTING AND SHOWING.** 1 hour.
Credit will be given for preparation of animal and showing the animal in the Little International Livestock Show.
358. **FUNDAMENTALS OF ANIMAL NUTRITION.** Prereq: Zoology 226, Chemistry 261.
A study of the fundamental principles of animal nutrition.
379. **DAIRY HERD OPERATIONS.** Prereq: Dairy Science 103, Animal Science 373.
All phases of dairy herd management with special emphasis on the following: herd appraisal, auction sales; classification, health programs; applications for registry and health certificates; intra- and inter-state shipments of animals; dairy farm plans and practices.
380. **DAIRY CATTLE JUDGING.** 3 hours.
A course planned to offer instruction in the judging of dairy cattle according to type and conformation.
385. **DAIRY PRODUCTS JUDGING AND GRADING.** 3 hours.
Scoring and grading of milk, butter, ice cream, and cheese.
389. **(MICROBIOLOGY) DAIRY MICROBIOLOGY.** Prereq: Bacteriology 350.
Determination of numbers and types of bacteria; use of microorganisms in the manufacture of dairy products; study of milk fermentations and disease-producing organisms applicable to milk.
390. **DAIRY CATTLE BREEDING.** Prereq: Plant Genetics 358.
A study of factors involved in improving the genotype and phenotype of dairy cattle. Mating systems and techniques, production testing, type classification, sire proofs and pedigrees. Application of genetics, anatomy, endocrinology, and physiology to improvement of dairy cattle.
392. **DAIRY CATTLE NUTRITION.** Prereq: Animal Science 373, Chemistry 261.
The application of fundamental knowledge of nutrition, physiology, environment, and economics in the feeding and management of the dairy herd.
394. **MARKET MILK AND RELATED PRODUCTS.**
The sanitary and legal requirements for producing, handling and processing

milk and related products; approved production methods; quality tests; processing operations; plant sanitation and efficiency.

395. DAIRY PLANT MANAGEMENT.

Fundamental principles of business and factory management practices as used in the dairy industry. Problems of personnel management, production methods, quality control, merchandising, dairy plant design and construction, records and business methods involved in dairy plant operations.

396. BUTTER AND CHEESE TECHNOLOGY. Prereq: Dairy Science 389. (Offered in alternate years, offered in 1968-69).

Theory and practices involved in the manufacture of dairy products through coagulation and precipitation phenomena as well as control fermentation; cheese varieties, butter, and fermented milks; starter activity; cheese ripening; and butter flavor development.

399. ICE CREAM MAKING. Prereq: Dairy Science 350.

Basic principles of ice cream mix composition, standardization, flavoring, stabilization, processing, freezing, merchandising, and storage of ice cream, sherbets, ices, and soft-serve dairy products.

411. (MICROBIOLOGY) MICROBIOLOGY OF MARKET MILK AND ICE CREAM. Prereq: Chemistry 261, and Dairy Science 389.

Microorganisms found in market milk, ice cream, and related products and their relationship to spoilage of the products and to epidemiology.

412. (MICROBIOLOGY) MICROBIOLOGY OF BUTTER, CHEESE AND CULTURED MILKS. Prereq: Chemistry 261, and Dairy Science 389.

Metabolic changes resulting from the growth of microorganisms occurring in milk and cream intended for manufacturing dairy products, and in butter, cheese, and cultured milks; bacteriophages affecting dairy microorganisms.

491. ARTIFICIAL INSEMINATION. 2 hours. Prereq: Veterinary Medicine 310, Dairy Science 379, 390, or Animal Science 405 or equivalent.

A study of the techniques involved in artificial insemination of farm animals with major emphasis placed on dairy cattle. The principles involved in semen production, collection, evaluation and use for insemination will be discussed.

493. MILK SECRETION. 3 hours. Prereq: Veterinary Medicine 310, Dairy Science 379, 390, or equivalent.

The application of certain fundamentals of anatomy, biochemistry, and physiology to a study of milk secretion. The relationship of various farm practices to maximum milk yields will be discussed from the fundamental standpoint.

800. DAIRY CHEMISTRY

801. THE NUTRITIONAL PROPERTIES OF DAIRY PRODUCTS

802. THE CHEMICAL ANALYSIS OF DAIRY PRODUCTS

803. PHYSICAL CHEMISTRY OF DAIRY PRODUCTS

805, SPECIAL PROBLEMS IN DAIRY CATTLE FEEDING AND MAN-

806. AGEMENT

810. DAIRY SEMINAR

819. ADVANCED DAIRY TECHNOLOGY

820. DAIRY TECHNOLOGY PROBLEMS

930. THESIS RESEARCH IN DAIRYING

Entomology

See Entomology listings under Arts and Sciences, Page 303

Food Science (FS)

COURSES FOR FOOD SCIENCE MAJORS

300. **FOOD PRESERVATION.** Three lectures and two 2-hour laboratories. Chemical, microbiological, and enzymatic changes occurring in foods and the control of such activity by various methods of processing and storage will be studied. Consideration will be given to questions of public health, nutritive value, quality of the finished product, and governmental regulations.
367. **FOOD INDUSTRIES SURVEY.** Prereq: Food Science 300, 409 or equivalent. (Offered 1967-68.)
This course includes the study of the sources of raw materials, the processing, storage, and handling of such processed foods as sugar, flour, salt, and spices; and the problems involved in the production of these products.
368. **MEAT PROCESSING.** Prereq: Microbiology 350.
This course includes instruction in killing, skinning, dressing of pork and beef; grading, care of hides; utilization of inedibles; curing of beef and pork; smoking, packaging, and storing of cured pork products.
386. **(POULTRY) POULTRY MARKET PRODUCTS TECHNOLOGY.** Prereq: Poultry 160 or Food Science 300 or equivalent.
Methods of processing shell, fluid and dried eggs, live and dressed poultry, and packaging and marketing of poultry products.
395. **(MICROBIOLOGY) MICROBIOLOGY OF FOODS.** Two lectures and three 2-hour laboratories. Prereq: Microbiology 350.
Microorganisms in natural and processed foods; their origin, nature, and effects on foods; enumeration; relations to health.
409. **COMMUNITY AND HOME FOOD PRESERVATION.** Prereq: Microbiology 350 and Chemistry 340 or equivalent. Three lectures and two 2-hour laboratories.
The principles of food preservation will be studied with reference to present practices and possible improved practices in home and community food preservation. The effect of various methods of food preservation will be evaluated in terms of public health, food spoilage, food quality, and the nutritional value of the foods.
411. **FOOD TECHNOLOGY PRINCIPLES AND INDUSTRIAL PRACTICES.**
412. Prereq: Microbiology 350, Chemistry 340 and Food Science 300 or 409. Two lectures and two 2-hour laboratories.
Biochemical, colloidal, enzymatic, microbial, and physical changes occurring in foods during processing will be integrated to show the fundamental principles

of food technology. Present practices, the application of research and food technology principles to the development of better products, and the food purity laws will be among the subjects studied.

414. **CHEMICAL AND MICROSCOPIC FOOD ANALYSIS.** Prereq: Microbiology 350, Chemistry 340, Food Science 300 or 409. Two lectures and three 3-hour laboratories.

Chemical, microscopic, and organoleptic methods of food examination basic to the detection of adulteration, to food grading, and to quality control.

- 415 a-b-c. **FOOD SCIENCE SEMINAR.** Prereq: Any two senior division courses in food science. 2 hours each.

A discussion course, required of all students majoring in the department in which journal articles from basic and applied fields of science are assigned, presented, and discussed.

421. **(MICROBIOLOGY) ENVIRONMENTAL MICROBIOLOGY.** Prereq: Microbiology 350. Two lectures and three 3-hour laboratories.

The role of environment on the growth and metabolism of organisms will be discussed. Agents used to retard, inhibit, or stimulate bacteria will be presented and their mode of action studied. Dynamics of the physical, physiological and chemical factors affecting bacteria and their resistance to antimicrobial agents will be discussed. Isolation of anarobes, enumeration and factors affecting sporogenesis, dormancy and spore germination will be examined.

422. **INSTRUMENTAL METHODS OF FOOD ANALYSIS.** Prereq: Food Science 414. Two lectures and two 4-hour laboratory periods per week.

Polarographic, spectrophotometric, colorimetric, and potentiometric methods of analysis as applied to food will be studied. Emphasis will be placed upon correlation and interpretation of results.

423. **FOOD PACKAGING.** Prereq: Food Science 412 and 414. Two lectures and three 3-hour laboratories.

Physical, chemical, microbiological, and economic problems related to food packaging. Characteristics and uses of metal, glass, paper, and flexible film packaging materials and containers. Methods of testing packages and packing materials for performance such as physical strength, water-vapor permeability, organic vapors and transmission, odor transmission, greaseproofness, and humidity equilibria of foods.

424. **ADVANCED TECHNOLOGY OF MEAT, FISH AND POULTRY PROCESSING.** Prereq: Food Science 411, 414, and 421.

Advanced theoretical and applied concepts relating to physical, chemical, enzymatic, and microbial changes occurring in meat, fish, and poultry products during processing will be studied with particular reference to canning, curing, freezing, refrigeration, spoilage of fresh and processed flesh products, and the use and development of by-products.

COURSES FOR NON-FOOD SCIENCE MAJORS

330. **MEATS JUDGING AND GRADING.** 3 hours. One lecture and two 2-hour laboratories.

A course which deals with the selection and grading of beef, lamb, and pork

carcasses and cuts. Research findings will be presented concerning the validity of present methods.

364. **TECHNOLOGY OF FROZEN AND REFRIGERATED FOODS.** 3 hours.
Two lectures and one 2-hour laboratory.
Chemical and physical changes encountered during freezing and refrigerated storage of foods, causes of spoilage, packaging, the retention of nutrients, and quality control. Principles of basic refrigeration systems and equipment and methods used in freezing fruit, vegetable, meat, and marine products at home, in locker plants, and in large commercial enterprises.
365. **MEAT CUTTING.** Prereq: Microbiology 350.
Designed to teach basic information concerning meat quality and skills in cutting beef, pork, lamb, and poultry products.
800. **(MICROBIOLOGY) INDUSTRIAL FERMENTATIONS**
819, **METHODS IN FOOD SCIENCE**
820.
821. **THERMAL AND RADIATION STERILIZATION OF FOODS**
830. **RADIATION PRINCIPLES**
856. **(CHEMISTRY) PROTEIN CHEMISTRY**

Horticulture (HOR)

101. **GENERAL HORTICULTURE.**
A survey of horticulture with discussions of the principles and practices used in the production of vegetables, fruits, flowers, and ornamentals. Primarily for non-horticultural majors.
308. **PRINCIPLES OF HORTICULTURE.** Prereq: Botany 323, 380.
A study of the principles of plant growth as they are applied to the production of horticultural crop plants. Emphasis is placed on the effect of temperatures, light, nutrients, and water on growth and development.
310. **GREENHOUSE MANAGEMENT.** 5 hours.
Emphasis is placed upon types of greenhouses and methods of construction; geographical and topographical locations; structural materials; heating; equipment; plans; estimates; irrigation; and management. Cloth and lath or slat houses; coldframes and hotbeds.
311. **FLORAL DESIGN.** 3 hours.
Emphasis is placed upon the science, art, and psychology of color; line and design; floral designs, basket and bowl arrangements; church, house, hotel and wedding decorations as well as wedding bouquets, corsages and emblems.
353. **SPRAYS, DUSTS, AND FUMIGANTS AND THEIR APPLICATIONS.**
Prereq: Plant Pathology 353 and Entomology 374.
Selection, preparation, and application of sprays, dusts, and fumigants for the control of insects, diseases, weeds, and other pests of horticultural crops. Especial attention is given to spraying and dusting schedules, effects of various chemicals on different kinds of plants, ecological factors, residues, application machinery, and economical considerations. The practical side of pest control is stressed.

362. **PLANT PROPAGATION.** Prereq: Biology 101, 102.
A study of the principles and practices underlying the increase in plant numbers with emphasis primarily on the anatomical and physiological basis for plant reproduction by various methods.
363. **NURSERY MANAGEMENT.** Prereq: Permission of the instructor.
A study of the basic fundamentals underlying the location, operation, and management of both retail and wholesale establishments.
368. **MANAGEMENT OF ORNAMENTALS.** Prereq: One course in botany and permission of the instructor.
A study of the various operations, equipment, materials, and work programs necessary for the proper and efficient professional maintenance and management of ornamental plantings.
369. **(AGRONOMY) MANAGEMENT OF TURF.** Prereq: One course in biology and permission of the instructor.
A study of turf grasses and growth requirements. The various operations, equipment, materials, and work programs for the proper and efficient maintenance and management of turf for golf courses and other specific uses.
400. **HORTICULTURAL SEMINAR.** 1 hour.
Open to all students in related fields. Attendance without registration for credit is permitted. Papers on selected topics to be presented by advanced students, faculty members, and guest speakers.
401. **THE FUNDAMENTALS OF FRUIT PRODUCTION.** Prereq: Botany 380 and Horticulture 308.
This course deals with the biological and chemical principles of plant life as directly applied to the economic production of fruit crops.
403. **THE PRINCIPLES OF VEGETABLE PRODUCTION.** Prereq: Botany 380 and Horticulture 308.
A study of the principles and practices involved in the production of vegetable crops. The literature on research having to do with the development of olericulture is reviewed and studied in relation to current problems.
405. **FLORICULTURE.** Prereq: Botany 380 and Horticulture 308.
Fundamental principles of plant growth and the effects of environmental factors such as temperature, water, air, nutrients, photoperiod and light intensity as they are related to cut flowers and potted plants grown under glass.
- 407, 408. **SPECIAL PROBLEMS IN HORTICULTURE.** 2-5 hours each. Prereq: Ten hours in one of the horticultural concentrations in courses numbered 300 or higher.
For the advanced undergraduate student who wishes to gain technical experience. Graduate students must schedule at least 5 hours a quarter and undertake a minor research problem.
421. **POST HARVEST PHYSIOLOGY.** Prereq: Two senior college courses in fruits or vegetables.
Physiology of maturation and the effects of temperature, light, bruising and other factors on ripening. Also the relation of the above to various operations and equipment used in harvesting, handling, preparation for market and storage of fruits and vegetables.

703. **ADVANCED GENERAL HORTICULTURE.** Prereq: 10 hours plant science and permission of instructor.
A study of the principles of plant growth as applied to the production of horticultural crops. Limited to candidates for the Master of Agricultural Extension and Master of Education degrees.
801. **HORTICULTURAL CROP IMPROVEMENT**
809. **THE HISTORY, LITERATURE, AND DEVELOPMENT OF HORTICULTURE**
930. **THESIS RESEARCH IN HORTICULTURE**

Plant Pathology (PAT)

353. **ELEMENTARY PLANT PATHOLOGY.** Three lectures and two laboratory periods. Prereq: Biology 101, 102.
An introduction to the study of disease in plants.
356. **CROP DISEASES.** Three lectures and two laboratory periods. Prereq: Plant Pathology 353.
Principles of disease diagnosis and control and their application in the production of field and horticultural crops.
383. **(FORESTRY) FOREST PATHOLOGY.** One lecture and two laboratory periods. Prereq: Biology 101, 102.
An introduction to disease of forest trees; identification and control.
- 415 a-b-c. **PLANT PATHOLOGY SEMINAR.** 1 hour each.
Discussion of selected topics in plant pathology.
420. **MYCOLOGY.** Three lectures and two laboratory periods. Prereq: Biology 101, 102.
An introduction to the biology of the fungi, including a survey of all classes.
421. **MYCOLOGY.** Three lectures and two laboratory periods. Prereq: Plant Pathology 420.
Comparative morphology and taxonomy of fungi.
423. **VIROLOGY.** 5 hours. Prereq: Plant Pathology 353.
The nature of plant viruses, their identification, host relations, transmission, purification, serology, and control.
425. **PLANT NEMATOLOGY.** 5 hours. Prereq: Plant Pathology 353 or 383.
Morphology and taxonomy of plant parasitic nematodes, with emphasis on characters used in identification.
526. **NEMATODE DISEASES OF PLANTS.** 5 hours. Prereq: Plant Pathology 425.
Diseases of crop plants caused by nematodes: hosts, symptoms, economic importance, distribution, pathogenesis, and control.
- 800, 801. **RESEARCH IN PLANT PATHOLOGY**
805. **RESEARCH METHODS IN PLANT PATHOLOGY**
815. **ADVANCED PLANT PATHOLOGY SEMINAR**
930. **THESIS RESEARCH IN PLANT PATHOLOGY**

Plant Genetics (GEN)

358. PRINCIPLES OF GENETICS. Five lectures. Prereq: Biology 101, 102.
Introduction to the principles of heredity and variation as related to all organisms.
401. PLANT GENETICS. Four lectures and one laboratory period. Prereq: Plant Genetics 358.
Advanced genetic principles from coding to the genetics of sterility and disease resistance, cytoplasmic inheritance, polyploidy, apomixis, and mutations.
402. PLANT BREEDING. Four lectures and one laboratory period. Prereq: Plant Genetics 358.
Fundamental methods utilized in the science of plant breeding and the important role that breeding plays in crop and tree improvement.
404. PHYSIOLOGICAL GENETICS. Four lectures and one laboratory period. Prereq: Plant Genetics 358, Chemistry 340 or Biochemistry 451 or the equivalent.
The biochemical basis of heredity; metabolic pathways and mechanisms of gene action; function and structure of the gene, mutations, and agents of metabolic control.
- 415 a-b-c. PLANT GENETICS SEMINAR. 1 hour each.
Discussion of selected topics in plant genetics and plant breeding.
810. RESEARCH IN PLANT GENETICS
- 811.
812. (AGRONOMY) SPECIALIZED PLANT BREEDING
815. ADVANCED PLANT GENETICS SEMINAR
820. QUANTITATIVE GENETICS
930. THESIS RESEARCH IN PLANT GENETICS

Poultry Science (PS)

160. POULTRY PRODUCTION. 3 hours.
An introductory course designed to provide basic information in poultry science.
358. (ANIMAL SCIENCE) FUNDAMENTALS OF ANIMAL NUTRITION. Prereq: Chemistry 261 or 340.
A study of the fundamental principles of animal nutrition.
371. COMMERCIAL POULTRY MANAGEMENT. Prereq: Poultry Science 160.
A detailed study of the management practices and principles used in the business of producing eggs and poultry meat. Emphasis is placed on the factors influencing costs and returns in poultry operations.
372. POULTRY BREEDING. Prereq: Plant Genetics 358.
A consideration of the inheritance of morphological and physiological characters. Emphasis is placed on the development of criteria for selection and the development of genetically sound poultry breeding programs.
373. (VETERINARY MEDICINE) POULTRY HEALTH. Prereq: Poultry Science 160 and Microbiology 350. Offered to students majoring in poultry science

and others that are qualified. (Taught alternate winter quarters in the School of Veterinary Medicine: will be taught in 1968-1969).

A study of common infections, parasitic and nutritional diseases of poultry; their causes, diagnosis, prevention, and control.

375. **POULTRY NUTRITION.** Prereq: Poultry Science 160, 358.

The application of the principles of nutrition to the avian species. A study is made of the biochemical aspects of the individual nutrients and their supply in terms of feedstuffs and practical poultry diets.

379. **POULTRY SEMINAR.** 1 hour. Prereq: Poultry Science 160.

Open to all students in related fields. Attendance without registering for credit is permitted. Topical discussion of current problems and papers of scientific work in poultry to be presented by the students, advance students, faculty members, and guest speakers.

380. **AVIAN ANATOMY AND PHYSIOLOGY.** Prereq: Biology 101, 102 or equivalent.

A lecture and laboratory study of avian systemic anatomy in conjunction with the related physiological functions.

386. **(FOOD SCIENCE) POULTRY MARKET PRODUCTS TECHNOLOGY.** Prereq: Poultry Science 160 or Food Science 300 or equivalent.

Methods of processing shell, fluid and dried eggs, live and dressed poultry, and packaging and marketing of poultry products.

393. **FEED MANUFACTURING.** 3 hours. Prereq: Poultry Science 375 or Animal Science 373 or Dairy Science 392.

A survey of the feed manufacturing industry; feed mill design, operation, finance, and organization; utility, space, and labor requirements.

401. **AVIAN PHYSIOLOGY.** Prereq: Chemistry 261 or 340.

A study of the physiology of circulation, respiration, digestion, metabolism, and the nervous system of the fowl with emphasis on the glands of internal secretion.

403. **STUDIES IN POULTRY NUTRITION.** Prereq: Poultry Science 375.

A study of the scientific literature in the field of poultry nutrition designed to bring the advanced student abreast of the problems of current interest in this field with special emphasis on research methods.

405. **ADVANCED POULTRY BREEDING.** Prereq: Poultry Science 372.

The development of practical poultry breeding programs. A study of the mode of inheritance and relative heritability of various characteristics of economic importance and criteria for effective selection toward their improvement.

406. **BIOLOGICAL RESEARCH LITERATURE REVIEW.** 2 hours.

Specialized library and laboratory reference tools will be introduced in preparation for exhaustive literature review in a restricted area of biological or animal sciences.

560. **ADVANCED POULTRY SCIENCE AND PRACTICE.** Prereq: Graduate status; Poultry Science 160 and one of the following: Bacteriology 350, Poultry Science 358, Zoology 390 or equivalent.

An advanced course designed to provide current information on poultry

genetics and physiology, nutrition, environment, market products technology, health and economics. Graduate credit limited to those students in professional degree programs.

- 803. EXPERIMENTAL METHODS IN POULTRY NUTRITION
- 806. PHYSIOLOGY OF AVIAN REPRODUCTION
- 808. (VETERINARY MEDICINE) PARASITIC DISEASES OF POULTRY
- 809. (VETERINARY MEDICINE) POULTRY DISEASES AND PARASITES
- 810. POULTRY SCIENCE SEMINAR
- 851, PROBLEMS IN POULTRY SCIENCE
- 852,
- 853.
- 930. RESEARCH AND THESIS

Agricultural Engineering (AEN)

Courses for B.S.A.E. Students

- 104, ENGINEERING GRAPHICS. 6 hours (2 hours a quarter). Two 3-hour
- 105, laboratory periods each quarter.
- 108. Use of drawing instruments, lettering, orthographic and pictorial drawing, concepts of description geometry, detail and assembly drawings, and the presentation of numerical and functional data with charts and graphs.
- 190. FRESHMAN SEMINAR. 1 hour.
Agricultural engineering survey and orientation.
- 202. ENGINEERING SHOP. 3 hours. Two 3-hour laboratory periods. Co-req.: Agricultural Engineering 104.
Machine tool work, cold metal work, carpentry, and oxy-acetylene and arc welding.
- 211. SURVEYING. 3 hours. Three 2-hour laboratory periods. Prereq: Mathematics 101 and Agricultural Engineering 105.
Surveying methods, instruments and computations related to field problems in taping, leveling, directions, curves, and land surveying.
- 325. SOIL AND WATER ENGINEERING. One 3-hour laboratory period. Prereq: Physics 137.
Engineering aspects of soil erosion and its control; principles, methods and design of drainage and irrigation systems.
- 326. ENGINEERING HYDROLOGY. 3 hours. Prereq: Agricultural Engineering 356.
Occurrence and movement of water, elementary meteorology, precipitation, evaporation, transpiration, infiltration, storage, runoff, and hydrograph analysis.
- 329. DESIGN OF HYDRAULIC STRUCTURES. 3 hours. Prereq: Agricultural Engineering 325 and 356.

Design of structures for impoundment, storage, management, use, and controlled disposal of water.

340. **ENGINEERING ECONOMICS.** 3 hours.
The mathematics of investments: decisions between alternates; depreciation and book value; calculating rates of return; sunk and incremental costs.
341. **APPLIED ENGINEERING MATHEMATICS.** 3 hours. Prereq: Mathematics 401.
Mathematical analysis, solution, and interpretation of engineering systems and data.
350. **STATICS OF ENGINEERING.** Prereq: Mathematics 255 and Physics 137.
Force systems, resultants, equilibrium, friction, centroids, and moments of inertia.
351. **DYNAMICS OF ENGINEERING.** Prereq: Agricultural Engineering 350.
A study of the motion of rigid particles and bodies under the action of balanced and unbalanced force systems. Includes force, mass, and acceleration, work and energy, and impulse and momentum methods.
352. **ENGINEERING MECHANISMS.** 3 hours. Prereq: Agricultural Engineering 351.
A study of the dynamics of machines.
353. **PROPERTIES OF ENGINEERING MATERIALS.** 4 hours. One three-hour laboratory. Co-req: Agricultural Engineering 355.
A study of the microscopic and macroscopic properties of materials and their application to engineering.
354. **INSTRUMENTATION AND CONTROL.** 3 hours. Prereq: Physics 239.
An introductory presentation of the basic theory, principles, and operation of instruments, controls, and automatic control systems.
355. **STRENGTH OF MATERIALS.** Co-req: Agricultural Engineering 351.
Elements of stress analysis, resistance, and design as applied to engineering materials and structures.
356. **FLUID MECHANICS.** One three-hour laboratory. Prereq: Agricultural Engineering 351.
Elements of engineering applications of the laws of fluid behavior; statics, kinematics, and kinetics of fluids.
357. **INTRODUCTORY SYSTEMS ANALYSIS.** 4 hours. Prereq: Agricultural Engineering 386 and Mathematics 401.
A study of the basic concepts of systems operation, determination of models for physical devices, flow diagrams, transfer functions and linear system analysis.
358. **ENGINEERING SYSTEMS DESIGN.** 3 hours. Prereq: Agricultural Engineering 375.
Case studies of farm materials handling systems with emphasis on the analysis and synthesis of the complete system, its optimization, alternates, and governing parameters.
359. **INTRODUCTION TO MECHANICAL VIBRATIONS.** 3 hours. Prereq: Agricultural Engineering 351, 355, and Mathematics 401.

Vibratory motion, including linear and torsional vibrations with one or more degrees of freedom; vibrations of beams and shafts; critical speeds.

361. AGRICULTURAL MACHINERY. 4 hours. One 3-hour laboratory period. Prereq: Agricultural Engineering 351.
Agricultural production machinery design, features, costs, performance, maintenance, and field testing.
362. AGRICULTURAL POWER. 4 hours. One 3-hour laboratory period. Prereq: Agricultural Engineering 373.
Thermodynamic principles, design, operation, rating, testing, and application of power units for agricultural uses.
363. MACHINE DESIGN. 4 hours. Two 3-hour laboratory periods. Prereq: Agricultural Engineering 355.
Application of principles of mechanics, physical properties of materials, and shop processes to the design of machine parts.
371. FARM STRUCTURES DESIGN. 4 hours. Two 3-hour laboratory periods. Prereq: Agricultural Engineering 353 and 355.
Environmental, space, and structural design of farm structures; cost estimates and specifications.
373. THERMODYNAMICS. 4 hours. Prereq: Mathematics 255 and Physics 138.
The properties and fundamental equations for gases and vapors; non-flow and steady flow energy equations; thermodynamics of the cycles for engines, compressors, and refrigeration systems.
374. HEAT TRANSFER. 4 hours. One 3-hour laboratory period. Prereq: Agricultural Engineering 373.
The theory of heat transmission by conduction, convection, and radiation in the steady and unsteady states. The solution of engineering problems involving heat transfer.
375. ENGINEERING PROCESSES. 4 hours. One 3-hour laboratory period. Prereq: Agricultural Engineering 374.
Engineering principles as applied to heating, cooling, dehydrating, drying, ventilating, size reduction, mechanical separations, and air-water-contact operations.
376. REINFORCED CONCRETE CONSTRUCTION. 3 hours. One 3-hour laboratory period. Prereq: Agricultural Engineering 355 and 371.
Mechanics of reinforced concrete. Design of floor systems, beams, columns, footings, and retaining walls.
377. STRUCTURAL ANALYSIS AND DESIGN. 4 hours. Prereq: Agricultural Engineering 355.
Introduction to the analysis of statistically determinate structures. Applications to beams, frames, and trusses.
378. ENVIRONMENTAL TECHNOLOGY. 3 hours. Prereq: Agricultural Engineering 374.
Control of environmental parameters in the production of livestock and in the storage of agricultural products. Selection of equipment and structures to achieve the desired environment is stressed.
380. REFRIGERATION. 3 hours. Prereq: Agricultural Engineering 374. Applica-

- tion of thermodynamics and heat transfer to the design of cooling systems for spaces, fluids, and solids; humidity control, reversed cycle, and control systems.
384. DIRECT CURRENT CIRCUITS AND MACHINES. 3 hours. One 3-hour laboratory period. Prereq: Mathematics 255 and Physics 239. Fundamentals of electric and magnetic circuits, networks and network theorems, and the theory and application of DC generators and motors.
386. ALTERNATING CURRENT CIRCUITS AND MACHINES. 4 hours. One 3-hour laboratory period. Prereq: Agricultural Engineering 384. Single phase and polyphase alternating current circuit theory and a detailed study of the operating characteristics of transformers, alternators, polyphase motors and single phase motors.
387. ENGINEERING ELECTRONICS. 4 hours. One 3-hour laboratory period. Prereq: Agricultural Engineering 386. Electronic devices, including transistors, with particular emphasis on the design of circuits for small signal amplifiers, relays, electronic timers, photoelectric devices, and gas-filled tubes.
388. RURAL ELECTRIFICATION. 4 hours. One 3-hour laboratory period. Prereq: Agricultural Engineering 386. A study of the factors influencing the design and selection of electric equipment, circuits, and devices which can be advantageously used in agricultural enterprises for light, heat, power, control, radiation and measurement.
392. SENIOR SEMINAR. Required. Professional duties, procedures, and ethics of the engineer.
393. ENGINEERING SPECIFICATIONS AND CONTRACTS. 3 hours. Prereq: Senior standing. Basic principles of contracts and contractual relations; preparation of specifications and other material which form an essential part of the contract documents.
802. SPECIAL TOPICS IN ENGINEERING
803. BIO-ENGINEERING SYSTEMS
804. SPECIAL ELECTRICAL PROBLEMS
805. AGRICULTURAL STRUCTURES DESIGN
806. ADVANCED FARM POWER AND EQUIPMENT
807. SOIL AND WATER CONSERVATION
809. INDUSTRIAL ELECTRONICS
810. EXPERIMENTAL STRESS ANALYSIS
811. PROCESS ENGINEERING
813. RESEARCH METHODS AND INSTRUMENTATION
930. THESIS

Courses for Non-Engineering Students

203. WOOD AND MASONRY TECHNOLOGY. Five 2-hour laboratory periods. Development of basic understanding and skills in wood and masonry work; selection, care and use of materials, hand tools, and power equipment; plans,

sketches and drawings; woodworking and carpentry; concrete and masonry; painting and wood finishing.

207. **METAL TECHNOLOGY.** Five 2-hour laboratory periods.
Development of basic understanding and skill in metal work; selection, care, and use of materials, hand tools, and power equipment; cold and hot metal work; gas and arc welding; plumbing; soldering; surface finishing; and service centers.
210. **SURVEYING:** Three 2-hour laboratory periods. Prereq: Mathematics 101.
Surveying methods, instruments, and computations related to field problems in taping, leveling, directions, curves, and land surveying.
212. **PRINCIPLES OF FOOD PROCESSING.** 3 hours. One 2-hour laboratory period.
Process and operation planning; principles of materials handling and plant layout; instrumentation and principles of process control; package engineering; principles of fluid flow, fans, pumps, and piping together with their selection for use.
213. **FOOD PROCESS ENGINEERING.** 3 hours. One 2-hour laboratory period.
Prereq: Agricultural Engineering 212.
Principles of heat flow, drying, evaporating, distillation and equipment and their incorporation in the food and dairy industries; principles of refrigeration and related equipment used in food storage and processing.
220. **DRAINAGE, IRRIGATION, AND EROSION CONTROL.** 3 hours. One 3-hour laboratory period.
Principles and methods of drainage, irrigation, and erosion control systems.
228. **SOIL AND WATER TECHNOLOGY.** Prereq: Agricultural Engineering 220 or equivalent.
Planning and design of water disposal, drainage, and irrigation systems and the study of research results as applied to conservation practices.
260. **FARM POWER MACHINERY.** 3 hours.
The operation, care, repair, and selection of farm machinery and tractors for use on farms.
265. **FARM BUILDINGS AND EQUIPMENT.** 3 hours.
A study of farm buildings, equipment, and facilities with emphasis on space, material, sanitary, managerial, and cost requirements.
280. **FARM ELECTRIFICATION.** 3 hours. Prereq: Physical Science 101.
Applications of electricity to agriculture; wiring systems for farm buildings; selecting, using, and controlling electrically operated equipment in farming operations.
430. **FOOD PLANT ENGINEERING.** Prereq: Agricultural Engineering 212 and 213, or consent of instructor.
Food plant design and layout; transportation of fluids, size reduction, mixing, and separation as incorporated in food and dairy processing plants.
501. **AGRICULTURAL ENGINEERING APPLICATIONS.** Prereq: Agricultural Engineering 203, and Education 336, or Agricultural Economics 301, or equivalent.
The application of engineering techniques to agricultural production and utilization practices, with emphasis on the organization, management, and physical

facilities for farm mechanics work on farms, in secondary schools, and in related farm occupations.

503. **FUNCTIONAL PLANNING OF FARM STRUCTURES AND UTILITIES.** Prereq: Agricultural Engineering 265 and Agricultural Economics 301 or equivalent.

Basic problems in planning farm structures for typical agricultural enterprises in the southeast; development, storage, treatment and distribution of farm water supplies; and the collection and disposal of sewage and farm wastes.

504. **MODERN FARM POWER AND MACHINERY.** Prereq: Agricultural Engineering 260 and Agricultural Economics 301 or equivalent.

Characteristics and principles of farm tractors and power units, both self-propelled and tractor-drawn, and related machinery. Emphases are on selection, operation, care, maintenance, and management.

505. **SOIL AND WATER CONSERVATION.** 3 hours. Prereq: Agricultural Engineering 220 and Agricultural Economics 301 or equivalent.

Technical aspects of soil and water conservation methods; planning and management of drainage, irrigation, and erosion control measures.

506. **ELECTRIC POWER AND CONTROL.** 3 hours. Prereq: Agricultural Engineering 280 and Agricultural Economics 301 or approval of instructor.

Principles of selection, installation, and maintenance of electric motors, controllers, automatic control systems, and electric heating and cooling equipment; electric measurements as evaluation techniques.

507. **FARM MATERIALS HANDLING.** 3 hours. Prereq: Agricultural Engineering 706.

Selection and evaluation of equipment for conveying, grinding, mixing, separating, drying and storing farm products. Emphasis is placed on planning complete materials handling systems.

508. **SPECIAL PROBLEMS IN AGRICULTURAL ENGINEERING TECHNOLOGY.** Prereq: Three courses in Agricultural Engineering and consent of instructor.

A detailed study of a special area of mechanized agriculture with emphasis on concepts, fundamentals, processes, limitations, and testing of approved problems.

Landscape Architecture

200. **BASIC DESIGN STUDIO.** Five laboratory periods.

Basic principles of design theory and philosophy. Application through the use of one and two dimensional problems involving form, light, color and texture.

201. **BASIC DESIGN STUDIO.** Five laboratory periods. Prereq: Landscape Architecture 200.

Further study of basic design principles with emphasis on problems in dimensions. Relationships between elements of space and time, mass and void, positive and negative.

202. **BASIC DESIGN STUDIO.** Five laboratory periods. Prereq: Landscape Architecture 200, 201 and 255.

The design concept: research, analysis, synthesis. A linking together of basic design philosophy as outlined in Landscape Architecture 200 and 201, the design concept and practical design situations. The continuity of theory between abstract and concrete.

255. **ARCHITECTURE DRAFTING.** Five laboratory periods.
Principles of orthographic projection, isometric drawing, one and two point perspective. Emphasis on lettering, composition and graphic presentation.
256. **AGRICULTURAL PROJECTIONS.** Five laboratory periods. Prereq: Landscape Architecture 255.
Use of perspective in presentation drawing. Shade and shadow techniques.
257. **RENDERING.** Five laboratory periods. Prereq: Landscape Architecture 255 and 256. Art 120.
Techniques used in the preparation of architectural plans, perspectives and illustrations. Emphasis on the exploration of various media and materials.
272. **HISTORY OF LANDSCAPE DESIGN.** Five lecture periods.
Development of the art of landscape design from early cultures to the present with special stress upon the transition of styles and the development of the naturalistic and contemporary periods.
273. **HISTORY OF ARCHITECTURE.** Five lecture periods. Prereq: Landscape Architecture 272 or consent of the instructor.
A survey of the principal periods of architectural history. Open to majors of all colleges and departments.
313. **LANDSCAPE DESIGN.** Five laboratory periods. Prereq: Landscape Architecture 255, Agricultural Engineering 104 or other drafting experience. (For students not majoring in landscape architecture).
Introductory problems in landscape design with emphasis on residential properties and gardens.
315. **INTERMEDIATE LANDSCAPE DESIGN STUDIO.** Five laboratory periods. Prereq: Landscape Architecture 202 and 350. Basic landscape design sequence.
Small scale projects involving elementary problems of design. Emphasis on circulation patterns, material characteristics and the use of small elements of design in the landscape.
316. **INTERMEDIATE LANDSCAPE DESIGN STUDIO.** Five laboratory periods. Prereq: Landscape Architecture 315.
Intermediate scale projects involving a variety of topographical characteristics, design elements, space and circulation requirements.
317. **INTERMEDIATE LANDSCAPE DESIGN STUDIO.** Five laboratory periods. Prereq: Landscape Architecture 315.
Emphasis on park and recreational design for various population requirements.
318. **ADVANCED LANDSCAPE DESIGN STUDIO.** Five laboratory periods. Prereq: Landscape Architecture 315.
Urban and suburban design studies involving a complexity of design elements featuring land use, ecology and circulation problems at the gross level and spatial and natural relationships at the intimate level.
319. **ADVANCED LANDSCAPE DESIGN STUDIO.** Five laboratory periods.

Prereq: Landscape Architecture 316.

Large scale projects with complex spatial and circulation requirements and requiring understanding of architectural and engineering problems. Civic and town design, regional planning.

320. **ARCHITECTURAL DESIGN STUDIO.** Five laboratory periods. Prereq: Landscape Architecture 302 and 357. Basic architectural design sequence. Exploration of material and structural logic as the basis for architectural design. Consideration of climatic and environmental aspects of design. Specific architectural problems involving principles of circulation.
322. **ADVANCED ARCHITECTURAL DESIGN STUDIO.** Five laboratory periods. Prereq: Landscape Architecture 320. Intermediate architectural design involving repetitive design elements, larger structures, more complex circulation requirements, modular coordination and architecture as space.
323. **ADVANCED LANDSCAPE ECOLOGY.** Five lecture periods. Prereq: Botany 121, physical science electives. Exploration of the ecological relationship of man and his environment. Introduces problems of geology, geography, climatology, physiology, pathology, entomology, zoology, etc., in an effort to seek a scientific basis for planning action.
333. **ADVANCED ARCHITECTURAL DESIGN STUDIO.** Five laboratory periods. Prereq: Landscape Architecture 320. Advanced architectural design. Projects requiring the solution of structural, material and circulation functions.
340. **PROFESSIONAL PRACTICE IN LANDSCAPE ARCHITECTURE.** 3 hours. Three lecture periods. Professional practice and ethics; contracts, reports and specifications.
350. **ELEMENTARY LANDSCAPE CONSTRUCTION.** Five laboratory-lecture periods. Prereq: Agricultural Engineering 210, Mathematics 100 and 101 or the consent of the instructor. Field construction and staking, landscape grading, earthwork calculations, drainage and elementary soil mechanics.
351. **PLANT MATERIALS.** Five periods. Prereq: Botany 121, Horticulture 101. A study of plant materials with emphasis on identifying characteristics, natural habitat and cultural requirements. Primarily trees, shrubs and vines.
352. **PLANT MATERIALS:** Five periods. Prereq: Botany 121, Horticulture 101. A continuation of Landscape Architecture 351 with emphasis on herbaceous plant materials.
354. **PLANTING DESIGN.** Five laboratory periods. Prereq: Landscape Architecture 351, 352, and 202. Use of plant material in relation to other landscape elements. Specific problems calling for the knowledge of plant characteristics and requirements. Preparation of planting plans and specifications.
355. **TERMINAL PROBLEM.** Five laboratory periods. Prereq: Second quarter senior standing or the consent of the department head. An advanced problem in landscape architecture, which, by its relative com-

prehensiveness, will serve as a final examination for the course of study as outlined in the program.

357. **ADVANCED LANDSCAPE ENGINEERING.** Five laboratory periods. Prereq: Landscape Architecture 350.
Design and detailing of landscape construction, structural analysis, irrigation and utility design, the characteristics and uses of landscape materials.
358. **ADVANCED LANDSCAPE CONSTRUCTION.** Five laboratory periods. Prereq: Landscape Architecture 357.
Advanced earthwork, road and highway engineering, construction of pavements, estimating and preparing contracts and specifications for landscape construction work.
364. **ADVANCED PLANTING DESIGN.** Five periods. Prereq: Landscape Architecture 354.
A continuation of Landscape Architecture 354. Primarily offered as an elective to Landscape Architecture and Horticulture majors desiring additional experience in planting design. Emphasis on large scale projects.
453. **CITY PLANNING.** Five periods. Prereq: Landscape Architecture 272 and 273.
Background course in city planning covering the history and bibliography of the subject and introducing the students to modern trends in planning. Designed as a foundation for further study of professional planning.
525. **REGIONAL RECREATION PLANNING.** 5 hours. 3 one-hour lectures and two one-hour lab periods. Prereq: Upper Division Standing and REC 384 or FOR 355.
An approach to regional scale recreation planning. Studies of existing regional land use recreation programs, their significance and implications to individual park planning. A look at space requirements, policies and financial considerations in the design profession.
527. **PARK DESIGN.** 3 hours. 1 one-hour lecture period and 2 one-hour lab periods. Prereq: LAR 525.
The study and formulation of master plans for specific recreational sites. Problems in diagramming of land use, site surveys, staging developments and planting design principles.
653. **CITY PLANNING.** Two laboratory periods and three lectures. An introduction to contemporary trends in planning. This course covers the history and bibliography of the subject with considerable supplemental readings and special projects.
- 701, 702, 703. **SPECIAL PROBLEMS IN LANDSCAPE ARCHITECTURE.** 5 to 20 hours. Prereq: A minimum of 10 quarter hours of senior division work in design, and consent of instructor.
704. Intensive studies in special aspects of landscape architecture designed to explore applications in such fields as park and recreation development, planting design, theory and history, landscape construction, rural and urban land use studies and development. The course will consist primarily of readings and seminar discussions with projects in drawing and model building. The assigned projects will be adjusted to the needs and interests of the individual student.

725. REGIONAL RECREATION PLANNING. 5 hours. 3 one-hour lecture periods and 2 one-hour lab periods.
Studies in regional design consisting of readings and seminar discussions with assigned projects on recreational planning.
727. PARK DESIGN. 3 hours. 1 one-hour lecture period and 2 one-hour lab periods.
Specialized studies in gathering site data, surveying, mapping, contour plotting and basic grading techniques. This course will place emphasis on plant identification and their potential in recreational site planting.
930. THESIS

Division of the Armed Services

Army Courses

The Basic Course consists of two hours of classroom work and one hour of drill per week.

The Advanced Course consists of four hours of classroom work for two quarters each year in the junior and senior years and one or more hours of drill per week for the entire junior and senior years. Certain additional elective academic courses are prerequisites to an Army commission. The PMS or the faculty adviser can furnish information concerning these courses.

- 1 a-b-c. MILITARY SCIENCE: 3 hours. Freshman year. A study of national security and the U. S. Army, to include international and global affairs with military implication, organization of the U.S. Army and of ROTC, leadership, marksmanship and individual weapons. Includes comparative analyses of Democracy and Communism particularly emphasizing the USSR and Chinese Communist threats to world stability. Trends in world military power and implications of these trends.
- 2 a-b-c. MILITARY SCIENCE: 3 hours. Sophomore year. A study of the military history and policy of the United States with selected references to the forces of the United States and Western allies. Concurrent coverage is given the development of modern land forces and modern weapons in the research and development process. Course includes a study of small unit tactics, to include combined arms teams and guerrilla warfare, map and aerial photograph reading and emphasis upon small unit leadership.
- 350 a-b. MILITARY SCIENCE: 6 hours. Junior year. A study of the art of leadership to include practical application; principals or organization and techniques of leadership are stressed. Course includes methods of instruction, principals of offensive and defensive tactics, battlefield communications, and the development of modern land forces and guerrilla warfare. Continuing emphasis is given to international affairs and the world military situation. Organization of the Army is covered with emphasis upon branches of the Army.
- 351 a-b. MILITARY SCIENCE: 6 hours. Senior year. A study of the responsibilities and techniques of the professional officer to include practical exercise of

command. Course includes operations and tactics, command and staff duties and responsibilities, combat orders and logistics, the military justice system, management and command principles and practices, military administration and service orientation. Analyzed concurrently are significant world events and trends which affect national defense.

- 351 f. ARMY AVIATION: 3 hours. For qualified students who have enrolled in or have completed MS 351 a-b. Consists of 35 hours of ground school instruction and 36½ hours of flight training leading to a pilot's license. Students must agree to continue Army Aviation training on active duty.

Air Force Courses

The basic course consists of two hours of classroom work and one hour of drill per week.

The advanced course consists of three hours of classroom work, one hour supervised research and one hour of drill per week.

- AS 100 a-b-c. WORLD MILITARY SYSTEMS: 3 hours. Freshman year. A comparative analysis of Democracy and Communism and how these two ideologies confront each other on the spectrum of war. Discussion of the military systems of each with emphasis on U. S. Air Force.
- AS 200 a-b-c. WORLD MILITARY SYSTEMS: 3 hours. Sophomore year. Discussion of the forces of the U. S. and Western Alliance, Soviet, Soviet Satellite and Chinese Communist forces. Trends in world military power and implication of these trends.
- AS 300 a-b-c. GROWTH AND DEVELOPMENT OF AEROSPACE POWER. 9 hours. Junior year. Evolution of airpower; Air Force concepts, doctrine and employment. Astronautics and space. Future development of aerospace power, vehicles, systems and problems in space exploration. The military threat of Communism and American strategic views.
- AS 400 a-b-c. THE PROFESSIONAL OFFICER. 9 hours. Senior year. Meaning of professionalism, professional responsibility. The military justice system; leadership theory and practices; management principles and practices. Problem solving. Qualified cadets receive ground school instruction and 35 hours flight training. On completion, cadets are qualified and eligible to take the examination for an FAA private pilot's license.

The College of Arts and Sciences

Art

Head: Dodd. Staff: Amos, Arnholm, Brokaw, Cahn, Coleman, Davis, DeZurko, Dieball, Feldman, Herbert, Hodge, Johnston, Junkin, Lowrey, McCutchen, Morgan, Paul, Rust, Sanderson, Schwarz, Thompson, Torlen, Vesely, Wachowiak, Walker, Warner, Wescott, Wright.

Art Appreciation

H-113 (213). ART APPRECIATION AND EXPERIENCE. (Honors course for non-art majors). Substitute for Art 317.

The course will combine lectures, discussions and studio experiences. This latter feature distinguishes the content of the course from the conventional art appreciation offering.

300. APPRECIATION OF THE VISUAL ARTS. (May be used as a substitute for FA 300. Not open to students with credit in Art H-113, FA 300, H-396, H-397, H-399, or Art 317.)

An understanding of the arts built upon an exposure to the painting, sculpture, architecture and other arts of contemporary and historical times. Illustrated lectures and reading will relate the sociological and psychological factors that influence the production of art and show the basic problems of design and technique in the development of an artist and his products.

411. AESTHETICS. (See Philosophy 411).

435. ART STRUCTURE. Prereq: Four courses in fine arts, two of which must be in the senior division.

Study of the theory of art. Designed as a general elective for advanced students of other departments.

Basic Design and Drawing

Art Studio Courses numbered 300 or above have prerequisites of Art 120, 130, 140, 216, 217 and 218.

120. ART STRUCTURE. Five laboratory periods.

Drawing and painting from slides, still life, figure, landscape, modeling in clay. Two visual-audio lectures per week.

130. ART STRUCTURE. Five laboratory periods.

Problems with emphasis on lettering and layout design. Three-dimensional work in clay, plaster, and wood. Two visual-audio lectures per week.

140. ART STRUCTURE. Five laboratory periods.

Drawing and painting. Experience in the manipulation of various three-dimensional materials, wood, paper, metal and synthetics. Two visual-audio lectures per week.

216. **DRAWING.** 3 hours. Three laboratory periods. Prereq: Art 120, 130, 140 or permission of instructor.
Drawing from setups, figures, animals and objects. Charcoal, pen, brush and ink, water color, oil, and various media are used.
217. **DRAWING.** 3 hours. Three laboratory periods. Prereq: Art 120, 130, 140, 216 or permission of instructor.
Continuation of Art 216.
218. **DRAWING AND PAINTING.** 3 hours. Three laboratory periods. Prereq: Art 120, 130, 140, 216, 217 or permission of instructor.
A continuation of Art 216 and 217.

Photography

320. **PHOTOGRAPHIC DESIGN.** Prereq: Consent of adviser or instructor.
Creative design through the use of photography. The student will investigate the experimental possibilities of the entire area of the light sensitive medium.
520. **PHOTOGRAPHIC DESIGN.** Prereq: Art 320 and one from Art 308, 313, 351, 352, or 387.
An advanced course in photographic design, plus extensive studio and dark-room work.

Drawing, Painting, and Composition

313. **PRINTMAKING.** Prereq: Art 120, 130, 140, 216, 217, 218.
An examination of the various printmaking or graphic techniques such as lithography, etching, engraving, drypoint, aquatint and block printing and the execution of original works in these media.
316. **PRINTMAKING.** Prereq: Art 313.
Concentrated work in printmaking media, including etching, engraving, drypoint, aquatint, collography, serigraphy, various relief processes and the planographic processes.
321. **DRAWING AND COMPOSITION.** Four laboratory periods and one lecture.
Prereq: Art 120.
Picture construction through design and composition.
322. **DRAWING AND MODELING.** Four laboratory periods and one lecture.
Prereq: Art 321.
Two and three-dimensional research in the anatomical construction of the human figure.
323. **DRAWING AND PAINTING.** Four laboratories and one lecture. Prereq: Art 321.
Advanced drawing and painting for drawing and painting majors. Open as an elective by permission of the instructor.
331. **PAINTING.** Four laboratory periods and one lecture. Prereq: Art 321.
Introductory painting. Aesthetic consideration of picture structure.
332. **PAINTING.** Four laboratory periods and one lecture. Prereq: Art 331.
Technical consideration of the preparation of grounds, mediums, and pig-

ments. Analyses of the techniques of the masters. Oil, tempera, and mixed techniques.

- 333. PAINTING. Four laboratory periods and one lecture. Prereq: Art 332.
- 334. PAINTING. Four laboratory periods and one lecture. Prereq: Art 333.
- 341. WATERCOLOR. Five laboratory periods. Prereq: Art 321 or 331. Study of transparent watercolor.
- 342. WATERCOLOR. Five laboratory periods. Prereq: Art 341. Continuation of 341 with emphasis upon opaque watercolor (Gouache).
- 517. ADVANCED PRINTMAKING. Prereq: Not less than 20 hours senior division drawing and painting courses, including Art 316.
Advanced work in printmaking media, including the traditional intaglio processes of etching, engraving, dropoint, aquatint and mezzotint; the various relief and planographic processes; the collograph and serigraph processes; and the combination of these various processes.
- 702. DRAWING AND COMPOSITION. Five laboratory periods. Prereq: Art 332 and 334.
- 703. DRAWING AND COMPOSITION. Five laboratory periods. Prereq: Art 702.
- 731. PAINTING. Five laboratory periods. Prereq: Art 334.
- 732. PAINTING. Five laboratory periods. Prereq: Art 731.
- 800. GENERAL ART
- 801. GENERAL ART
- 804. DRAWING AND COMPOSITION
- 833. PAINTING
- 921. ART PROBLEMS

Art History

Art history courses numbered 300 or above have prereq. of Art 287, 288 and 289 or permission of instructor.

H-111 (211). THE HISTORY OF THE VISUAL ARTS AS RELATED TO MAN (Honors).

An interpretive study of the primary art movements of the Western world from their rudimentary beginnings as seen in the arts of primitive man up through the visual arts of the contemporary scene. This course substitutes for Art 317.

- 287. INTRODUCTION TO THE HISTORY OF ANCIENT ART. 3 hours.
A survey of world art from Prehistoric through Medieval times. The formal characteristics of the paintings, sculpture, architecture, and some of the minor arts will be analyzed in their stylistic and symbolic developments which will be discussed in relation to the changing cultural backgrounds.
- 288. INTRODUCTION TO THE HISTORY OF RENAISSANCE ART. 3 hours.
A survey of world art during Renaissance times and up to the Nineteenth

Century. The formal characteristics of the painting, sculpture, architecture, and some of the minor arts will be analyzed in their stylistic and symbolic developments which will be discussed in relation to the changing cultural backgrounds.

289. INTRODUCTION TO THE HISTORY OF MODERN ART. 3 hours.
A survey of world art during the 19th and 20th centuries. The formal characteristics of the painting, sculpture, architecture, and some of the minor arts will be analyzed in their stylistic and symbolic developments which will be discussed in relation to the changing cultural backgrounds.

476. HISTORY OF HELLENIC ART.
A specialized study of Hellenic architecture, sculpture, painting, and minor arts of the Archaic, Transitional, Fifth Century, Fourth Century, Alexandrian, and Graeco-Roman periods as well as the important periods of Classical Revival in Europe and America. Both literary and archaeological sources will be used.

477. ROMAN ART.
Roman art during the periods of the Republic and the Empire, while Rome was in direct contact with the great Hellenistic art centers such as Alexandria, Pergamon and Antioch. These contacts as they influenced Roman art, and the most significant results of these cultural interchanges to civilization.

480. ART OF THE ITALIAN RENAISSANCE.
A study of architecture, sculpture, and painting of the fourteenth, fifteenth, and sixteenth centuries in Italy.

481. HISTORY OF NORTHERN RENAISSANCE ART.
Historical study of the architecture, sculpture, painting, and minor arts north of the Alps from the waning of the Medieval period to around the beginning of the seventeenth century. The artistic achievements in France, Germany, England, and the Low Countries will be presented against the background of their political, social, and literary accomplishments.

482. BACKGROUNDS OF MODERN ART, 19th CENTURY.
An examination of sources for 19th and 20th Century art with illustrative studies of the most important 19th century artists and their works. Primary attention is given to painting, architecture, and sculpture.

483. MODERN ART, 20th CENTURY. Prereq: Art 482 or permission of instructor.

Art of the present century with illustrative studies of the most important artists, analysis of their works and sources of origin, beginning with French Fauvism and German Expressionism in painting, paralleled with studies of experimental tendencies in sculpture and architecture and other visual arts which are traced to works of the present day.

484. BAROQUE ART.
A study of art from the end of the Renaissance to the Industrial Revolution. Emphasis on the history of painting and its relationship to architecture, sculpture, and literature of the period. Special study is given to such major artists as Bernini, El Greco, Velasquez, Rubens, Rembrandt, Vermeer, Poussin, and Watteau.

488. **ART OF PRE-COLUMBIAN AMERICA.** Prereq: Art 287, 288, 289 or permission of instructor.
The art product of America from earliest times through the 15th Century with emphasis given to the pre-Inca peoples of South America and the Maya, Zapotec, Toltec, Aztec and related peoples of Mexico and Central America.
489. **POST-COLUMBIAN LATIN AMERICAN ART.** Prereq: Art 287, 288, 289 or permission of instructor.
A study of the unique product resulting from the combination of Western Culture with native arts in Latin America from the 15th Century to the present.
491. **EARLY MEDIEVAL ART.** Prereq: Art 287, 288, 289 or permission of instructor.
Begins with the collapse of antique civilization and traces the subsequent art historical developments of architecture, sculpture, painting, and the minor arts in the succeeding period of the Middle Ages. A review of Roman and Early Christian Art, the progression of Byzantine artistic endeavor in the East.
492. **MEDIEVAL ART OF WESTERN EUROPE.**
European art history from Carolingian through Gothic period. Sources and development of various styles in their national and international variations.
498. **ARTS OF THE UNITED STATES BEFORE 1865.**
Study of the arts of the area of the United States beginning with that of the American Indians and continuing with the architecture, sculpture, painting, and minor arts from Colonial times until 1865. Particular attention is given to the sources for these arts and their relationship to the physical and social situation.
499. **ARTS OF THE UNITED STATES, 1865-PRESENT.**
Study of the arts of the United States from 1865 through the periods of industrialization and international political and economic leadership. Stress is given the evolving role of American cultural characteristics found in architecture, sculpture, painting, and minor arts (particularly Industrial Design), their present-day manifestations and significance.
- 880, 881. **SPECIAL PROBLEMS IN HISTORY OF ART.**

Advertising Design and Commercial Art

306. **ADVERTISING DESIGN I.** Four laboratory periods and one lecture. Prereq: Art 216, 217, 218, 308, and 210. Visual communication and graphic techniques.
307. **GRAPHIC PROJECT.** Prereq: Art 306, 308, 309, 310, 313 and 320.
Application of drawing, painting and design experiences to the field of illustration. Experimentation with various media and techniques. Study of reproduction methods.
308. **ADVERTISING LAYOUT.** Three laboratory periods and two lectures.
Fundamentals of color, design, typography, and reproduction related to modern advertising problems. Layout of newspaper, magazine, and direct-mail advertising.

309. **ADVERTISING DESIGN II.** Four laboratory periods and one lecture. Prereq: Art 306, 310, 331 or 341.
Continuation of Art 306. Advanced problems in advertising design including preparation of layouts, comprehensive and finished art, study of reproduction problems.
310. **LETTERING.** Four laboratory periods and one lecture. Prereq: Art 130.
Principles of lettering and letter construction with experience in lettering as used and reproduced today. Study of typography in relation to lettering and advertising design.
504. **THE VISUAL ARTS IN COMMUNICATION.** Prereq: Two senior division courses in art and consent of instructor.
Creative manipulation of lettering, calligraphy, plastic patterns and technical processes integrated toward functional communication.
506. **ART FOR MECHANICAL REPRODUCTION.** Prereq: 20 hours senior division courses in commercial design.
Research in and experimentation with the manipulation of drawing and painting media and techniques applicable to mass reproduction through the medium of photo-engraving.
507. **THREE-DIMENSIONAL DESIGN.** Prereq: Two senior division courses in graphic or advertising design.
Comprehensive problems in applied graphic and three-dimensional design. Emphasis will be placed on the development, structural and communicative processes, and the solution in environmental terms.
508. **SPECIAL PROBLEMS-GRAPHIC DESIGN.** Prereq: Three senior division courses in graphic design.
Advanced individual research into graphic design media and techniques and their application to visual communications.

Crafts

251. **CRAFTS.** Five laboratory periods.
Metal work, jewelry, weaving, textile printing, and wood work.
350. **WEAVING.** Five laboratory periods. Prereq: Art 120, 130 and 140.
Hand-weaving designed for contemporary living. Experience in drapery, upholstery, and suiting with emphasis on color and texture.
351. **TEXTILE DESIGN AND PRINTING.** Five laboratory periods. Prereq: Art 251.
A course in designing and producing contemporary fabrics by silk screen method.
352. **JEWELRY AND METAL WORK.** Five laboratory periods. Prereq: Art 251.
A thorough grounding in the techniques necessary to execute well-designed objects in metals including forming, repousse, stone setting, tool making, metal finishing, enameling and centrifugal casting.
355. **CRAFTS.** Three hours each. Three laboratory periods.
356. **Introductory course in crafts.**

550. **TEXTILE DESIGN AND PRINTING.** Prereq: Two senior division art courses including Art 350 or 351.
An exploration into the creative potentialities of silk screen designing and printing methods, making use of film stencil, tusche, block-out, and photo stencil methods.
552. **JEWELRY AND METAL WORK.** Prereq: Two senior division art courses including Art 352.
An advanced course in design and fabrication in metal. Creative sculptural use of metal as applied to the human module, whether decorative or functional. Exploration in centrifugal casting, alloying, raising, chasing, lapidary, plating, and allied techniques.

Ceramics

260. **POTTERY.** Five laboratory periods.
Form, proportion, and simple ornament as related to pottery shapes. Laboratory exercises and related lectures in hand-building pottery. No previous art experience is required.
261. **POTTERY.** Three hours. Three laboratory periods.
An elementary course in pottery designed for those students desiring a three hour elective course. Laboratory exercises in handbuilding pottery forms, decorating, glazing, and firing ceramic ware.
361. **POTTERY.** Four laboratory periods and one lecture. Prereq: Art 260.
Laboratory exercises and related lectures in the use of the potter's wheel. Examination of pottery in relation to other art processes.
362. **CERAMIC DECORATIVE PROCESSES.** Four laboratory periods and one lecture. Prereq: Art 361.
The ceramics of past civilizations is examined to understand better the forming processes, decorative techniques, and artistic standards in pottery making. The adaptation of these techniques applied to the laboratory as a basis for individual experimentation by the student.
363. **CERAMIC CALCULATIONS.** Two laboratory periods and three lectures. Prereq: Art 361.
The chemistry and arithmetic of glazed formulas, composition, and computations studied from the standpoint of technical and artistic points of view.
366. **CERAMIC GLAZES.** Four laboratory periods and one lecture. Prereq: Art 363.
Continuation of Art 363. Emphasis on the adaptation of the fundamentals of glaze behavior to decorative and forming processes.
367. **CERAMIC PROBLEMS.** Five laboratory periods. Prereq: Art 366.
Course for advanced students in ceramics who have sufficient background and technical knowledge to carry on independent projects. Problems combining research in design and ceramic technology are selected in consultation with the instructor.
368. **CERAMIC PROBLEMS.** Five laboratory periods.
Continuation of Art 367.

560. **ADVANCED CERAMIC DESIGN.** Five laboratory periods. Prereq: Art 367 and 368.
Individual development in the use of the materials and processes of the ceramic designer. Emphasis on the functional and aesthetic requirements of form and ornament in contemporary ceramics.
561. **HISTORICAL PROCESSES IN CERAMICS.** Five laboratory periods. Prereq: Art 367 and 368.
Individual research into ceramics of the past and adaptation of knowledge to technical and aesthetic solutions of contemporary problems.

Sculpture

370. **SCULPTURE.** Five laboratory periods. Prereq: Art 120, 130, 140, 216, 217, 218.
A beginning course in sculpture. Basic forms are explored through a series of problems employing carving, modeling and constructive methods.
371. **SCULPTURE.** Five laboratory periods. Prereq: Art 370.
Portrait and figure study in sculpture composition.
372. **SCULPTURE.** Five laboratory periods. Prereq: Art 371.
Carving and/or welding which includes the fundamental descriptions of these crafts and a concern for the nature of materials used.
373. **SCULPTURE.** Five laboratory periods. Prereq: Art 372.
Introduction to the lost-wax method of producing bronze sculpture. The production of sculpture in wax, venting of waxes, the investment of these waxes in refractory molds, the firing of the molds, and casting in bronze will constitute the major emphasis of this course.
571. **SCULPTURE—CONSTRUCTION.** Five laboratory periods. Prereq: Art 372.
A course in sculpture construction utilizing welding and wood joining techniques. Emphasis to be placed on constructions in metal, wood and plastic.
572. **SCULPTURE—CASTING.** Five laboratory periods. Prereq: Art 373.
The production of wax models, venting, investing, casting, chasing, and mounting of finished work will provide the student with an opportunity to carry on independent experimentation and study within the medium of cast bronze sculpture.
573. **SCULPTURE MATERIALS.** Five laboratory periods. Prereq: Art 372, 373.
A course concerned with the student relating formal three-dimensional concepts of sculpture as they apply to material or combinations of materials. The student has his choice of working in depth in such materials as cast bronze, cast cement, direct plaster, direct cement, fire clay, welding metal, stone and wood.
574. **EXPERIMENTAL CASTING.** Five laboratory periods. Prereq: Art 572.
Experiments in CO₂ methods of sand casting, styrofoam casting and wax casting with emphasis on promoting individual development in the use of process and materials.

Art Education

305. ART AND THE CHILD. Five laboratory periods.
The child, his development and needs in creative art experiences. Two and three dimensional laboratory experiences in drawing, painting, graphic sculpture and crafts appropriate in later use with children. Discussions, readings and field trips.
337. CREATIVE CRAFTS AND THE CHILD. 3 hours. Three laboratory periods.
Prereq: Permission of instructor.
Advanced three-dimensional laboratory experiences in sculpture, puppetry, and general crafts appropriate in later use with children in the home, school and institution. Emphasis on the development of a creative craft program for children.
505. ART EXPERIENCES WITH CHILDREN. 3 hours. Three laboratory periods. Prereq: Permission of instructor.
Selected readings and discussion, implementation of creative art experiences with children through Saturday children's art classes. Evaluation of teaching experiences, supervision, discussion and readings.
513. CRAFTS FOR TEACHERS. Five laboratory periods.
Crafts for teachers with emphasis on three-dimensional media suitable for adaptation to elementary, secondary and higher education art programs as well as integration with classroom activities.
514. DRAWING AND PAINTING FOR TEACHERS. Five laboratory periods.
Prereq: Two senior division courses and permission of instructor.
Laboratory experiences in drawing, painting and composition related to the problems of applying these various methods to elementary, secondary and higher education art programs.
515. DESIGN FOR TEACHERS. Five laboratory periods. Prereq: Two senior division courses.
Two and three-dimensional design experiences in various media. Emphasis on teaching techniques and problems in design.
523. STUDIO PROBLEMS IN ART EDUCATION. Five laboratory periods.
Prereq: Permission of instructor.
Specific problem areas, according to individual needs, are investigated, discussed and evaluated.
524. STUDIO PROBLEMS IN ART EDUCATION. Five laboratory periods.
Prereq: Art 523 or permission of instructor.
Continuation of Art 523.
536. ART AND THE ADOLESCENT. Three laboratory periods. Prereq: Two senior division courses and permission of instructor.
A course emphasizing the needs and development of the pre-adolescent and adolescent in terms of creative expression. Lecture, discussion, readings.
539. SUPERVISION OF ART. Three laboratory periods. Prereq: Two senior division courses and permission of instructor.
Reading, discussions and observations of the total educational setting in

America toward creative implementation of the art program. Designed for art education majors, supervisors, and administrators.

540. ART, THE CHILD AND THE SCHOOL. Five laboratory periods. Prereq: Permission of instructor.
Art and its relationship to the needs of the pre-school and school child. The development of the child through the creative process is examined through laboratory work, discussions, and readings toward improving teaching in the schools.
570. ORGANIC DESIGN IN CONTEMPORARY LIVING. Prereq: Two senior division courses in education, two senior division courses in art, and consent of instructor.
A course for advanced students in designing in terms of space, movement, and light. Abstract problems and those centered directly in life today are explored.

Interior Design

386. INTERIOR DESIGN. Prereq: Art 287, 288 and 289.
A study of architecture, concepts of interior space, the great periods of furniture design and allied crafts, as a background for comparison with contemporary architecture, furniture, new materials, methods of manufacture, and present day needs.
387. INTERIOR DESIGN. Five laboratory periods. Prereq: Two from Art 216, 217, 218.
Shop practice in the problems of interior design. A practical application of the theories of color and light as they relate to interiors and furnishings. Practical work in preparing paints and colors for walls, wood finishing, drapery construction. Use of new materials in accessories.
389. INTERIOR DESIGN. Four laboratory periods and one lecture. Prereq: Landscape Architecture 255.
Drawing and rendering of plans and elevations; measuring and scaling of interiors and furnishings on a basis of design and functions.
390. INTERIOR DESIGN. Four laboratory periods and one lecture. Prereq: Landscape Architecture 255 and Art 389.
Creative problems in the designing of chairs, tables, case goods, and accessories. Lectures on design, contemporary materials, and methods of construction.
391. INTERIOR DESIGN. Four laboratory periods and one lecture. Prereq: Landscape Architecture 255 and Art 390.
Individual and group projects in planning or remodeling and furnishing of domestic interiors, or commercial interiors. Emphasis on the creative approach and conception of the problem as a whole. Each problem carried through with complete plans, evaluations, specifications, and perspective renderings.
392. PROCEDURES IN INTERIOR DESIGN. Prereq: Art 386, 387, 389 and 390.
Procedures and ethical practices of interior design execution, designer-client relations, presentation of drawing, pricing, wholesale buying, trade showrooms and the study of various types of contracts.

589. INTERIOR DESIGN. Five laboratory periods. Prereq: Art 389, 390 and 391. An investigation into the problems of the planning of architectural spaces for public and residential uses. Research studies will be made into the disposition of space, type of historical or contemporary decorative treatments, types of equipment and furnishings, materials and color coordination. Problems and readings.
590. INTERIOR DESIGN. Five laboratory periods. Prereq: Art 389, 390 and 391. Investigation into the designing of special equipment: furniture, built-in equipment, special lighting, and custom design. Special emphasis on research into historical procedure in design and construction.
591. INTERIOR DESIGN. Five laboratory periods. Prereq: Art 389, 390 and 391. Individual creative problems of coordination of all aspects of interior from original concept to completed finished drawings and presentations of material schedules.

Technical Problems

301. TECHNICAL PROBLEMS. Five laboratory periods.
A special course for students qualified to carry out individual projects in studio areas. Work is done independently of the regularly scheduled classes. Scheduling of this course must be approved by the Head of the Department of Art.
302. TECHNICAL PROBLEMS. Five laboratory periods. Continuation of Art 301.

Biochemistry (BCH)

(Chemistry Building)

Head: Peck. Staff: Aleem, Brewer, Cormier, Dukelow, Dure, McRorie, Novelli, Sansing, Teas, Williams.

301. A TERMINAL COURSE IN GENERAL BIOCHEMISTRY. Four lectures and one two-hour laboratory. Prereq: Chemistry 261 or equivalent.
451. BIOCHEMISTRY (VETERINARY PHYSIOLOGY 451). Four lectures or recitations and one laboratory period. Prereq: Chemistry 261 and a course in botany or biology or zoology or animal science or poultry science. Structure and characteristics of biological compounds.
452. BIOCHEMISTRY (VETERINARY PHYSIOLOGY 452). Four lectures or recitations and one laboratory period. Prereq: Biochemistry 451. Metabolism of biological compounds and macromolecules.
801. ADVANCED BIOCHEMISTRY
802. ADVANCED BIOCHEMISTRY
804. PHYTOCHEMISTRY
806. ENZYMOLOGY
808. BIOCHEMICAL RESEARCH TECHNIQUES
812. SPECIAL TOPICS IN BIOCHEMISTRY
856. PROTEIN CHEMISTRY (FOOD TECHNOLOGY)
892. NUCLEIC ACID METABOLISM (BOTANY 892)

Research and Thesis

- 810. BIOCHEMISTRY SEMINAR
- 814. INTRODUCTION TO RESEARCH IN BIOCHEMISTRY
- 900. LABORATORY RESEARCH IN BIOCHEMISTRY
- 901. PROBLEMS IN BIOCHEMISTRY
- 930. THESIS IN BIOCHEMISTRY

Division of Biological Sciences

Joint Course Offerings

(Biological Sciences Building)

The following courses are offered jointly by the Departments in the Division of Biological Sciences. For separate Departmental listings, see Microbiology (page 327), Biochemistry (page 290), Botany (page 291), Entomology (page 303), Zoology (page 377), and Psychology (page 349).

- 101. PRINCIPLES OF BIOLOGY. Four lectures and one three-hour laboratory.
- 102. An integrated introduction to biology from molecules through cells, organisms and ecosystems.

Botany (BOT)

(Biological Sciences Building)

Head: Van Fleet. Staff: Beck, Brown, Bryant, Carlton, Duncan, Edmisten, James, McGinnis, Michel, Monk, Mulcahy, Nicholson, Plummer, Sansing, Veech, Watson, Westfall, Westra.

- 121. ELEMENTARY BOTANY. Three one-hour lecture periods and two two-hour laboratory periods.
A study of (a) the structure of stems, leaves, and roots; (b) growth and nutritive processes of plants; (c) methods of reproduction in seed bearing plants.
- 122. ELEMENTARY BOTANY. Three one-hour lecture periods and two two-hour laboratory periods.
A study of (a) heredity, variation, and evolution of seed plants; (b) representative members of each of the major plant groups; and (c) the relations of plants to their environment.
- 205. IDENTIFICATION OF FLOWERING PLANTS. Five two-hour lecture-laboratory periods with two all-day field trips. Prereq: None.
Biology 101 and 102 are recommended. Spring quarter.
Terminology and procedure in the identification of flowering plants.
- 306. IDENTIFICATION OF TREES AND SHRUBS. Five two-hour lecture-laboratory periods. Prereq: None. Biology 101 and 102 are recommended. Fall quarter.
Identification of trees and shrubs including identification in winter condition.

323. **ELEMENTARY PLANT ANATOMY.** Three one-hour lecture periods and two two-hour laboratory periods. Prereq: Biology 101-102.
The origin and development of the organs and tissue systems of vascular plants, and comparative study of the structure of roots, stems, leaves, flowers, and fruits.
358. **METHODS IN PLANT HISTOLOGY.** Five double laboratory periods. Prereq: Biology 101-102.
Principles and methods of killing, fixing, embedding, sectioning, staining, and mounting plant materials for microscopic study.
375. **PLANT ECOLOGY.** Three one-hour lecture-discussion periods, two double periods of field trips or laboratory per week, and/or occasional weekend field trips. Prereq: Biology 101-102.
Plant geography, community analysis, symbiosis, species, populations, limiting factors, cycles, rhythms, and applied implications.
380. **PLANT PHYSIOLOGY.** Three one-hour lectures and two double laboratory periods. Prereq: Biology 101-102.
A survey of physiological processes occurring in plants and the conditions which affect these processes.
390. **SPECIAL PROBLEMS IN BOTANY.** Independent research and research participation in selected problems. Prereq: two senior division courses in botany.
401. (Forestry). **PHYSIOLOGY OF WOOD PLANTS.** Three lectures and two double laboratory periods. Prereq: Botany 380 or Forestry 203, or Horticulture 308.
Special topics in water relations, nutrition, photosynthesis, shoot and root development, dormancy, cambial activity, and reproduction in woody plants.
471. **TAXONOMY OF SEED PLANTS.** Two one-hour laboratory-discussion periods and three two-hour laboratory periods or field trips. Prereq: Botany 205 or equivalent and any other senior division course in botany or approved course in plant pathology, forestry, or geography.
Identification and classification of seed plants with emphasis on the flora of the southeastern states.
473. **IDENTIFICATION OF GRASSES.** Five double laboratory periods. Prereq: Biology 101-102 and two senior division courses in botany or approved courses in other plant sciences.
Identification and classification of grasses with emphasis on structure and ecology. Numerous economically important species are included.
474. **PLANT EVOLUTION.** Five lectures. Prereq: Introductory genetics or permission of instructor.
A study of evolutionary mechanisms.
476. **VEGETATION OF NORTH AMERICA.** Six hours library-laboratory, three hours seminar per week and a week-end field trip. Prereq: Fifteen hours credit in botany, geology and geography, or agriculture.
Theories of plant geography, climax formations, and the causes of contemporary vegetation. Includes floristics, indicator plants and problems in land utilization. Emphasizes eastern North America.

482. NUTRITION OF GREEN PLANTS. Two lectures and three double laboratory periods. Botany 323 and 380.
A study of the nutrition of the higher plants, including major and minor elements and deficiency symptoms.
- 510, BIOLOGY FOR HIGH SCHOOL TEACHERS. 10 hours. Three lectures
511. and two double laboratory periods. Prereq: two senior division courses in the biological sciences.
A two-course sequence for high school biology teachers or prospective teachers of high school biology enrolled in the College of Education. No credit for students majoring in the biological sciences.
520. FIELD AND LABORATORY BOTANY. Two lectures and three double laboratory periods and special field trips. Prereq: Biology 101-102 or equivalent and two senior division courses in botany or education.
Designed especially for teachers. Particular emphasis is placed upon the identification of local flowering plants and ferns, and upon the selection and use of materials for correlating the study of plants with other subjects.
522. ADVANCED FIELD AND LABORATORY BOTANY. Two lectures and three double laboratory periods and special field trips. Prereq: Botany 520.
A second course primarily for teachers, emphasizing plant identification, environmental relationships, and plant distribution.
- 802, PROBLEMS IN BOTANY
804.
811. PLANT RADIOECOLOGY
830. PRINCIPLES OF RADIOISOTOPES (AGRICULTURE 830)
831. MORPHOLOGY OF SEED PLANTS
840. CYTOLOGY
842. CYTOGENETICS
849. INTRODUCTION TO RESEARCH
850. MORPHOGENESIS
860. AQUATIC PLANTS
872. ADVANCED TAXONOMY OF SEED PLANTS
875. AUTECOLOGY
887. ADVANCED PLANT PHYSIOLOGY
888. PLANT GROWTH AND DEVELOPMENT
889. PLANT WATER RELATIONS
890. PLANT HISTOCHEMISTRY
892. NUCLEIC ACID METABOLISM (BIOCHEMISTRY)

Chemistry (CHM)

(Chemistry Building)

Head: Pelletier. Staff: Agerton; Dobson; Garst; Handler; Heric; Herman; Janzen; Johnston; King, A. D.; King, R. B.; Leyden; Pfluger; Philbrook; Stammer; Story; Taylor; Waggoner; Walsh; Whitehead; Whitten.

Majors in chemistry must meet these minimum requirements:
Chemistry 280, 340, 341 and 390

Inorganic Chemistry

- 111, ELEMENTARY CHEMISTRY. Four lectures or recitations and one laboratory period per week each quarter.

A non-mathematical study of chemical principles. Either the 111, 112 or 121, 122 sequence is a prerequisite for Chemistry 261.

- 121, GENERAL CHEMISTRY. Four lectures or recitations and one laboratory period per week each quarter. Mathematics 100 is a prereq. or co-req. for Chemistry 121.

The first course covers the chemistry of the non-metallic elements, including a systematic treatment of fundamental chemical principles. The second course is a continuation of the first, including a general survey of the metallic elements.

- H-125, GENERAL CHEMISTRY (Honors). Not open to students with credit in

- H-126. Chemistry 121-122. 10 hours. Four lectures or recitations and one laboratory period per week each quarter.

The basic concepts of chemistry.

- 421, ADVANCED INORGANIC CHEMISTRY. Five lectures or recitations per week. Prereq: Chemistry 223 and one other chemistry course with laboratory. The course emphasizes periodicity of the chemical properties of the elements.

- 426, INTERMEDIATE INORGANIC CHEMISTRY. 3 hours each. Prereq: 427. Chemistry 490c or 491c or equivalent.

- 501, GLASSBLOWING. 1-3 hours. Prereq: Four science courses with laboratory. How to make and repair glass apparatus.

- 515, DEVELOPMENT OF CHEMICAL THEORIES. Five lectures or recitations. Prereq: Twenty hours in natural sciences. Limited to candidates for the Master of Education or B.S. in Education.

The development and significance of laws, theories and hypotheses from the Greek period to the present.

- 522, ADVANCED INORGANIC PREPARATIONS. One lecture and four laboratory periods. Prereq: Chemistry 122 and two other chemistry courses with laboratory.

Selected syntheses of inorganic compounds.

- 525, CHEMISTRY FOR TEACHERS. Limited to candidates for B.S. in Education or Master in Education degree. Four lectures or recitations and one laboratory period. Prereq: Ten hours of chemistry and twenty hours of physical sciences. Preparation for teaching general science and high school chemistry.

- 821, ADVANCED INORGANIC CHEMISTRY

- 821.1. MODERN INORGANIC THEORY

- 821.2. MODERN INORGANIC THEORY

**Not open to students with credit in chemistry. Cannot be used toward any B.S. degree.

821.3. STRUCTURAL INORGANIC AND STEREO-CHEMISTRY

825. SPECIAL TOPICS IN INORGANIC CHEMISTRY

825.1. NON-AQUEOUS SOLVENTS

825.2. THE LESS-FAMILIAR METALLIC ELEMENTS

Analytical Chemistry

223. QUALITATIVE INORGANIC ANALYSIS. Two or three lectures or recitations and three or two laboratory periods. Prereq: A grade of 70 or better in Chemistry 121, 122.

The fundamental theories of qualitative analysis and analysis of common cations and anions by semi-micro methods.

280. QUANTITATIVE INORGANIC ANALYSIS. Two lectures or recitations and three laboratory periods. Prereq: Chemistry 223.

The fundamental theories of quantitative analysis and typical analyses involving volumetric and gravimetric methods.

480. ADVANCED QUANTITATIVE ANALYSIS. One or two lectures or recitations and four or three laboratory periods. Prereq: Chemistry 280 and Chemistry 490c or 491c or equivalent.

Advanced work in inorganic quantitative analysis.

580. INSTRUMENTAL METHODS OF ANALYSIS. Two lecture and three laboratory periods. Prereq: Chemistry 480 or equivalent.

This course covers the use of special instruments of analysis. These include refractometers, electrophotometers, spectrophotometers, and electrical instruments.

881. ADVANCED ANALYTICAL CHEMISTRY

881.1. ADVANCED ANALYTICAL CHEMISTRY

881.2. ADVANCED ANALYTICAL CHEMISTRY

881.3. ADVANCED ANALYTICAL CHEMISTRY

884. CURRENT TOPICS IN ANALYTICAL CHEMISTRY

Organic Chemistry

261. ELEMENTARY ORGANIC CHEMISTRY. Four lectures or recitations and one laboratory period. Prereq: Chemistry 112, or 122, or with consent of Head of Department. Not open to students with credit in organic chemistry.

A brief terminal introduction to organic chemistry with material of especial interest to students of agriculture, home economics and forestry.

340, 341, 342. ORGANIC CHEMISTRY. Four or three lectures or recitations and one or two laboratory periods each quarter. Prereq: A grade of 70 or better in Chemistry 121, 122.

A three-quarter sequence designed to give the beginning student a foundation in the modern concepts of organic chemistry.

343. ORGANIC CHEMISTRY. 3 hours. Prereq: Chemistry 341.

The lecture part only of 342.

430. INTERMEDIATE ORGANIC CHEMISTRY. 3 hours each. Prereq: Chemistry 442 and 490c or 491c or equivalent or consent of Head of Department.
431. istry 442 and 490c or 491c or equivalent or consent of Head of Department.
- 432.
441. ORGANIC QUALITATIVE ANALYSIS. One consultation and four laboratory periods. Prereq: Chemistry 342 or consent of Head of Department. Identification of pure organic compounds and of mixtures.
442. ORGANIC QUALITATIVE ANALYSIS. Limited to candidates for B.S. in Chemistry. One consultation and four laboratory periods. Prereq: Chemistry 342 and 490b or 491b or equivalent.
540. ORGANIC CHEMISTRY FOR TEACHERS. Limited to candidates for B.S. in Education or Master in Education. Four lectures and one laboratory period. Prereq: Ten hours in chemistry and twenty hours of physical and/or biological science.
831. ADVANCED ORGANIC CHEMISTRY
- 831.1. MODERN ORGANIC THEORY
- 831.2. MODERN ORGANIC THEORY
- 831.3. MODERN ORGANIC THEORY
834. CURRENT TOPICS IN ORGANIC CHEMISTRY
840. ADVANCED ORGANIC PREPARATIONS
842. ORGANIC QUANTITATIVE ANALYSIS

Physical Chemistry

309. ELEMENTS OF PHYSICAL CHEMISTRY. Five lectures or recitations. Prereq: Chemistry 223, 340 and Physics 127.
A brief introduction to physical chemistry, designed primarily for pre-medical students.
417. PRINCIPLES OF MOLECULAR SPECTROSCOPY. 3 to 12 hours (3 hours per quarter). Prereq: Chemistry 490c or 491c or equivalent.
418. METHODS OF MOLECULAR SPECTROSCOPY. 2 to 8 hours (2 hours per quarter). Prereq: Chemistry 490c or 491c or equivalent.
- 490 a-b-c. PHYSICAL CHEMISTRY. 15 hours. Four lectures or recitations and one laboratory period. Prereq: Chemistry 280, 340, Physics 229 and Mathematics 255.
A three-quarter course in the fundamental principles of physical chemistry and typical laboratory experiments.
- 491 a-b-c. PHYSICAL CHEMISTRY. 12 hours.
The lecture part only of 490 a-b-c.
492. CHEMICAL THERMODYNAMICS. 3 hours. Prereq: Chemistry 490c or 491c or equivalent.
493. QUANTUM CHEMISTRY. 3 hours. Prereq: Chemistry 490c or 491c or equivalent.
494. CHEMICAL KINETICS. 3 hours. Prereq: Chemistry 490c or 491c or equivalent.

495. RADIOCHEMISTRY. 3 hours. Prereq: Chemistry 490c or 491c or equivalent.
891.2. ADVANCED CHEMICAL THERMODYNAMICS
895. SPECIAL TOPICS IN PHYSICAL CHEMISTRY
895.2, STATISTICAL THERMODYNAMICS
895.3.
895.5. MOLECULAR STRUCTURE

General, Research and Thesis

305. THE LITERATURE OF CHEMISTRY. 3 hours. Prereq: 15 hours of Chemistry or consent of Head of Department.
An introduction to the literature of chemistry, research procedures, and directions which can be found only in original articles.
347, INTRODUCTION TO RESEARCH. (Field to be inserted). 5 hours each.
348, One lecture and four library or laboratory periods. Prereq: Chemistry 427 or 349.
441 or 480 or 490c or consent of Head of Department.
400. THE HISTORY OF CHEMISTRY. 5 hours. Prereq: 25 hours of chemistry or consent of Head of Department.
811. CHEMICAL SEMINAR
849. INTRODUCTION TO RESEARCH (Field to be inserted)
900. LABORATORY RESEARCH IN CHEMISTRY (Field to be inserted)
901. PROBLEMS IN CHEMISTRY
930. THESIS IN CHEMISTRY

Classics (CLC)

(The Bishop House)

Head: Alexander. Staff: Best, Boggess, Harris, Rutledge, Scudder.

CLASSICAL CULTURE

All courses in this section are given in English translation.

301. CLASSICAL CULTURE: GREECE.
A study of the characteristics of Greek literature, made principally through translations of selections from Greek authors.
302. CLASSICAL CULTURE: ROME.
A study of the characteristics of Latin culture, made principally through translations of selections from Latin authors.
H-305 (301). CLASSICAL CULTURE: GREECE (HONORS).
For honors students only. A survey of Greek literature in which more extensive reading is done than in Classical Culture 301. There will be supplementary readings and required papers. Not open to students with credit in 301.
H-306 (302). CLASSICAL CULTURE: ROME (HONORS).
For honors students only. A survey of Roman literature in which more exten-

sive reading is done than in Classical Culture 302. There will be supplementary readings and required papers. Not open to students with credit in 302.

310. **ENGLISH DERIVATIVES FROM GREEK AND LATIN.**
General etymology and vocabulary of the English language. Prefixes, suffixes, and root words, as well as families of words will be studied.
358. **ROMAN LITERATURE IN TRANSLATION.**
Detailed study of selected Latin authors, with special emphasis on biography as a literary type.
426. **GREEK HISTORY. (HISTORY).**
A study of Greek history through the time of Alexander the Great.
427. **ROMAN HISTORY. (HISTORY).**
A study of Roman history to the dissolution of the empire.
456. **HOMER AND THE EPIC TRADITION.**
A study of Homer in translation emphasizing his influence on later European literature. Analysis of the epic as a literary form; reading of selected epics of other periods.
457. **CLASSICAL DRAMA.**
A study of translation of tragedies and comedies surviving from ancient Greece. Reading of Greek and Roman plays and of other literature chosen for comparison.
801. **GREEK CIVILIZATION**
802. **ROMAN CIVILIZATION**

Greek (GRK)

Freshmen may elect the three introductory courses in Greek.

201. **ELEMENTARY GREEK.**
202. A double course meeting for two quarters in the elements of the Greek language; study of Greek history, geography, and social customs.
203. **READING IN GREEK.** Prereq: Greek 201 and 202.
Selected readings from Greek authors.
304. **HOMER.** Prereq: Greek 201, 202 and 203 or equivalent.
Detailed study of selections from the Iliad or the Odyssey.
- H-500. **HONORS COURSE IN GREEK**

Latin (LAT)

Freshmen may elect the three introductory courses in Latin. Students continuing Latin begun in high school will be placed in the appropriate course on the basis of personal consultations with instructor.

201. **ELEMENTARY LATIN.**
202. A double course meeting for two quarters in the elements of the Latin language.
203. **INTERMEDIATE LATIN.** Prereq: Latin 201 and 202 or two high school units in Latin.

Selected readings from Cicero's orations; review of forms and syntax.

304. **READING IN LATIN.** Prereq: Latin 203 or equivalent.

Selected readings from Virgil and Ovid.

305. **LIVY.** Prereq: Latin 304 or equivalent.

Selected readings from the *Histories* of Livy.

306. **HORACE.** Prereq: Latin 304 or equivalent.

Selected readings from the *Odes* of Horace.

400. **ADVANCED READING COURSE.** Prereq: Ten hours of advanced work in Latin.

Reading in Latin authors; review of grammar; history of Latin literature.

H-500. HONORS COURSE IN LATIN

Comparative Literature (CML)

(Bishop House, Moore College, and Park Hall)

The Comparative Literature Program is a joint undertaking of the several departments of the Division of Language and Literature. It is under the general direction of the Chairman of the Division of Language and Literature, and is administered by a committee whose Chairman is Dr. Calvin S. Brown.

400. **THE PICARESQUE NOVEL.**

A study of the origin of the picaresque novel and its development in Spain, France, England, and other countries. (Offered alternate years. Offered 1967-68).

411. **MEDIAEVAL NARRATIVE.**

A study of the types of mediaeval narrative — epic, romantic, sage beast-epic, fabliau, and exemplum — with reading and analysis of outstanding examples of these types. (Offered alternate years. Offered 1966-67.)

413. **SATIRE IN EUROPEAN LITERATURE.**

A comparative study of satire as a literary type. Its history in Western literature will be traced, and outstanding examples of its various types and periods will be studied in detail. (Offered alternate years. Offered 1967-68.)

417. **THE TWENTIETH-CENTURY NOVEL.**

The crisis in twentieth-century Western civilization as reflected in the fiction of such writers as Joyce, Proust, Mann, Gide, Kafka, Camus, and Moravia.

422. **DEVELOPMENT OF REALISM IN MODERN DRAMA AND LITERATURE (DRAMA).** Prereq: Two senior-division courses in English, speech, drama, classics, modern foreign languages, or comparative literature. The rise and development of realism in 19th century drama and theater. (Comparative study of major realistic plays of the 19th century in European countries. Influence of these plays and playwrights on European drama.)

451. **MUSIC AND LITERATURE (MUSIC).**

A comparative study of the forms, relationships, and aesthetics of music and literature. Admission by consent of the instructor.

456. **HOMER AND THE EPIC TRADITION.**

A study of the epics of Homer in translation emphasizing their influence on

later European literature. Analysis of the epic as a literary form; reading of selected epics of other periods.

457. **CLASSICAL DRAMA.**

A study of translation of the tragedies and comedies surviving from ancient Greece, with particular emphasis on the development and influence of dramatic forms and variations in themes of classic origin. Reading of Greek and Roman plays and selected plays of other literatures chosen for comparison.

802. **THE DEVELOPMENT OF THE HISTORICAL NOVEL**

810. **PROBLEMS IN COMPARATIVE LITERATURE**

813. **THE FAUST LEGEND IN LITERATURE**

821. **THE PLAYS OF HENRIK IBSEN (DRAMA)**

822. **THE PLAYS OF AUGUST STRINDBERG (DRAMA)**

830. **HISTORY OF LITERARY CRITICISM**

840. **PROBLEMS OF LITERARY CRITICISM**

855. **THE DON JUAN LEGEND IN LITERATURE**

864. **THE RENAISSANCE IN THE ROMANCE COUNTRIES**

Drama (DRA)

(See Speech and Drama)

Economics (ECN)

(See Economics in the College of Business Administration)

English (ENG)

Head: West. Staff: Aiken, Appleby, Arl, Bailey, Baine, Barnett, Beaumont, Beckham, Betette, Brown, Bufkin, Carson, Christofoli, Davidson, Eidson, Free, Galanty, Glass, Gregory, Harrison, Hutcherson, Keen, Koon, Krickel, Leamon, Lindemann, Longshore, Lower, McCartney, McCullough, McWhorter, Magill, Marshall, Montgomery, Moore, Osier, Parks, Peake, Reeves, Ruark, Sams, Shields, Stephenson, Talmadge, Taylor, Thurman, Tison, Waller, Wallis, Washington, Watkins, Willis.

Credit for English 101, 102, 121, and 122 is prereq. for English courses numbered 203 or above.

101, **COMPOSITION.** 10 hours (5 hours a quarter). English 101 is prereq. for 102. English 102.

First quarter: grammar, punctuation, mechanics, diction, and sentence structure. Second quarter: readings for composition. Themes and parallel reading required throughout the course. Conferences on themes.

H-105. **COMPOSITION AND LITERATURE (HONORS).**

For honors students, this course replaces English 101 and 102. Reading and writing will be given equal stress. Literary works will be studied as specimens of effective writing, and students will be expected to apply the principles and

techniques thus learned in their own writing. Not open to students who have had both English 101 and 102.

121. WESTERN WORLD LITERATURE. 10 hours (5 hours a quarter).

122. Prereq: English 101, 102.

A survey of Western World literature from Homer to the twentieth century.

H-125. WESTERN WORLD LITERATURE (HONORS). 10 hours (5 hours a

H-126. quarter). Prereq: English 101 and 102 or English H-105.

Available for honors students only. Reading and discussion of masterpieces of Occidental literature from Homer to Thomas Mann. Complete works will be read, and there will be individual papers and reports. H-125 is not open to students who have had English 121, and H-126 is not open to students who have had English 122.

203. ENGLISH LITERATURE TO 1800.

A general course in English literature designed to give any student a broad knowledge of the subject. English 203 and English 204 together offer a full survey of English literature, but either or both of these courses may be taken.

204. ENGLISH LITERATURE AFTER 1800.

Continuation of English 203.

305. LYRIC POETRY.

A study of the types, techniques, and interpretations of poems selected from English and American literature.

311. HISTORY OF THE ENGLISH LANGUAGE.

The development of English from its beginnings to the present time.

343. MODERN DRAMA.

360. ADVANCED COMPOSITION.

Factual writing. Admission by consent of the instructor.

361. THE SHORT STORY.

A history of the short story as a literary form.

370. CREATIVE WRITING. Prereq: English 360.

Emphasis upon the short story and the personal essay. Admission by consent of the instructor.

375. THE NOVEL.

A study of the outstanding eighteenth and nineteenth century English and American novels.

380. THE MODERN NOVEL.

A study of the modern novel in England and America.

400. OLD ENGLISH.

A study of the language and literature of England before the Norman Conquest, with reading of selected texts.

402. CHAUCER.

A study of the Canterbury Tales, Troilus and Criseyde, and minor poems.

403. MILTON.

A study of the work and times of John Milton.

405. **THE AGE OF JOHNSON.**
A study of the works of Samuel Johnson and his most important contemporaries.
407. **THE ENGLISH DRAMA TO 1642.**
A study of the English drama (exclusive of Shakespeare) from the beginning to the closing of the theatres.
408. **RESTORATION AND EIGHTEENTH CENTURY ENGLISH DRAMA.**
The history of the English drama in the late seventeenth and the eighteenth centuries.
409. **ELIZABETHAN POETRY.**
A study of the Elizabethan non-dramatic poets from Spenser to Donne.
411. **ADVANCED GRAMMAR AND SYNTAX.**
This course is recommended to students interested in teaching or in writing.
412. **SEVENTEENTH CENTURY PROSE AND POETRY.**
A study of the Metaphysical and Cavalier poets and of some contemporary prose.
414. **EARLY EIGHTEENTH CENTURY PROSE.**
A study of Defoe, Swift, Addison, and Steele and some of their contemporaries.
415. **EARLY EIGHTEENTH CENTURY POETRY.**
A study of Alexander Pope and some of his contemporaries.
416. **EARLY ROMANTIC LITERATURE.**
A study of Wordsworth, Coleridge, and some eighteenth century pre-romantic writers.
417. **LATE ROMANTIC LITERATURE.**
A study of Byron, Shelley, and Keats.
418. **BEOWULF.**
A study of the text, with consideration of linguistics, the epic tradition, and Anglo-Saxon civilization.
420. **AMERICAN LITERATURE TO 1865.**
A survey of literary works and the main intellectual currents.
422. **AMERICAN LITERATURE AFTER 1865.**
425. **ROMANTICISM IN AMERICAN LITERATURE.**
A study of the works of Emerson, Whitman, Hawthorne and Melville.
427. **REALISM IN AMERICAN LITERATURE.**
A study of the works of Twain, James, Howell and Crane.
429. **SOUTHERN LITERATURE.**
A survey of the intellectual thought and literary achievement in the South from 1610 to the present time, with emphasis upon Poe, Timrod, and Lanier.
440. **SHAKESPEARE. Part I.**
Richard III; Julius Caesar; Anthony and Cleopatra; A Midsummer Night's Dream; The Merchant of Venice; As You Like It; Romeo and Juliet; Hamlet.
441. **SHAKESPEARE. Part II.**
Henry IV (1); Henry V; Coriolanus; Twelfth Night; The Tempest; Measure for Measure; The Winter's Tale; Othello; King Lear; Macbeth.

- 442. VICTORIAN POETRY.
A study of the major Victorian poets, chiefly Tennyson, Browning, and Arnold.
- 452. VICTORIAN PROSE.
A study of the major Victorian Prose writers, chiefly Carlyle, Mill, Arnold, and Ruskin.
- 460. SURVEY OF TWENTIETH-CENTURY LITERATURE.
- 461. TWENTIETH-CENTURY BRITISH POETRY.
- 462. TWENTIETH-CENTURY AMERICAN POETRY.
A study of American poetry from the Imagist Movement to the present.
- 803. MILTON
- 806. SEMINAR IN ENGLISH LITERATURE
- 808. MIDDLE ENGLISH.
- 810. SEMINAR IN HISTORICAL ENGLISH LINGUISTICS
- 815. SEMINAR IN EIGHTEENTH-CENTURY LITERATURE
- 820. SEMINAR IN AMERICAN LITERATURE TO 1865
- 822. SEMINAR IN AMERICAN LITERATURE AFTER 1865
- 823. AMERICAN HUMOR
- 824. AMERICAN LOCAL COLOR
- 829. SEMINAR IN SOUTHERN LITERATURE
- 830. LITERARY CRITICISM
- 840. SEMINAR IN ELIZABETHAN DRAMA
- 842. SEMINAR IN VICTORIAN LITERATURE
- 850. BIBLIOGRAPHY AND METHODS OF RESEARCH
- 865. SEMINAR IN MODERN LITERATURE

Entomology (ENT)

(Biological Sciences Building)

Head: Lund. Staff: Beckham, Brady, Callahan, Coleman, Cox, Davis, Ebel, Franklin, French, Harris, Himel, Hunter, Jordan, Knight, Nolan, Norde, Paul, Starks, Tippins, Tsao, Weathersby, Womack, Yates.

Students registered in the Franklin College of Arts and Sciences may, with the permission of the head of the department, credit one or more of the following zoology courses toward a major in entomology: Zoology 372 and Zoology 457.

- 225. INSECT NATURAL HISTORY. Three lectures and two double laboratory periods. Prereq: Biology 102.
An introduction to the classification, biology and habits of insects.
- 353. ECOLOGY. Three lectures and two double laboratory periods. Prereq: Biology 102.
Lectures on the basic principles of ecology with laboratory and field exercises emphasizing population and community insect ecology.
- 370. INSECT MORPHOLOGY. Two lectures and three double laboratory periods.

Prereq: Entomology 225.

An introduction to insect structure and phylogeny.

371. INSECT TAXONOMY. Two lectures and three double laboratory periods.

Prereq: Entomology 225.

A study of the principles of taxonomy with practice in the classification of all the orders of insects.

374. ECONOMIC ENTOMOLOGY. Three lectures and two double laboratory periods. Prereq: Biology 102.

A brief introduction to entomology followed by a study of the recognition and control of insect pests of field, orchard, garden and home.

376. MEDICAL ENTOMOLOGY. Three lectures and two double laboratory periods. Prereq: Biology 102.

A brief introduction to entomology followed by a study of the species of insects and related arthropods of particular importance in the cause or transmission of diseases of man and the lower animals.

382. FOREST PROTECTION: ENTOMOLOGY. Three lectures and two double laboratory periods. Prereq: Biology 102.

A brief introduction to entomology followed by a study of the insect pests of American forests.

390. SPECIAL PROBLEMS IN ENTOMOLOGY. Prereq: Consent of instructor.

A course designed to permit especially interested and well-prepared undergraduate students to pursue an entomology problem approved by the staff member under whom the work will be done. 1-5 hours credit.

415. INSECT PHYSIOLOGY. Three lectures and two double laboratory periods.

Prereq: One course in organic chemistry and one course in Entomology.

An introduction to the general physiological processes and functions of the various organ systems of insects.

453. ADVANCED INSECT ECOLOGY. Three lectures and two double laboratory periods. Prereq: Entomology 353 and two senior division courses in Entomology or Zoology. (For graduate credit, one course in statistics is required.)

A study of the theories of insect distribution and abundance and the evaluation of research data bearing on these theories. (Offered alternate years. Offered 1968-69.)

474. ADVANCED ECONOMIC ENTOMOLOGY. Three lectures and two double laboratory periods. Prereq: One of the following entomology courses: 374, 376, or 382. For graduate credit, one additional senior division course is required.

An advanced treatment of economic entomology including actual field work in experimental methods, biological control, and the insect transmission of plant diseases.

477. CHEMISTRY AND TOXICOLOGY OF INSECTICIDES AND FUNGICIDES. Three lectures and two double laboratory periods. Prereq: One course in organic chemistry and one of the following Entomology courses: 374, 376, or 382.

A study of the physical and chemical behavior of insecticides and accessory materials and of their toxicological effects upon plants and animals.

480. **INTRODUCTORY ACAROLOGY.** Three lectures and two double laboratory periods. Prereq: One senior division course in biological science. For graduate credit, one additional senior division course is required.
An introductory study of the structure, classification and biology of mites.
573. **INSECTS IN FIELD AND STREAM.** Two lectures and three double laboratory periods. Prereq: Two elementary courses in biological science and two courses numbered 300 or above in biological science or education.
A study of insects and related forms found on land and in water; their identification and life habits, and the control of noxious forms, with emphasis on the use of these forms in the teaching of high school biology.
575. **ADVANCED FIELD AND STREAM ENTOMOLOGY.** Two lectures and three double laboratory periods. Prereq: Entomology 573 or 225.
This course is a sequel to Entomology 573. Emphasis is placed upon more specific insect identification, environmental relations and insect distribution.
800. **ENTOMOLOGY SEMINAR**
805. **INSECT PARASITES**
816. **ADVANCED INSECT PHYSIOLOGY**
871. **TAXONOMY OF INSECT LARVAE**
873. **ADVANCED GENERAL ENTOMOLOGY**
880. **ADVANCED ACAROLOGY**
900. **PROBLEMS IN ENTOMOLOGY**
930. **THESIS**

Fine Arts (FA)

(Fine Arts Building and Visual Arts Building)

Given under the general direction of the Chairman of the Division of Fine Arts.

300. **MUSIC AND THE VISUAL ARTS.** No credit will be allowed for Fine Arts 300 when credit is already shown for Art 300 or 317, Music 343, or H-396, H-307, or H-300.

Nature and materials of the visual arts in their relation to man, with emphasis on the influence of art products in contemporary living and thinking. A field of study comprising painting, sculpture, architecture, graphic arts, arts of industry and commerce. Also a study of works of outstanding figures in music taken chronologically.

- H-396. **FINE ARTS IN THE MIDDLE AGES.**

The development of the Fine Arts from approximately 900 A.D. to 1500 A.D. will be studied in this colloquium through examination of works of art, music, and drama. An effort will be made, within an historical frame of reference, to determine the relationships of the fine arts to the religious, cultural, and social patterns of the Middle Ages.

- H-397. **FINE ARTS IN THE RENAISSANCE.**

The development of the fine arts from approximately 900-1600 A.D. will be undertaken in this course through the study of works of art, music, and drama. In addition to the historical aspect, efforts will be made to determine relation-

ships to the religious, cultural and social patterns of the various periods. This is a substitute for Fine Arts 300.

H-399. THE FINE ARTS IN THE TWENTIETH CENTURY.

An analyzation of psychological, historical and environmental commonalities basic to art, music and drama, by experiencing works of art from three areas and discussion of these works separately and as parts of a more fundamental pattern. This is a substitute for Fine Arts 300.

French (FR)

(See Romance Languages)

Geography (GGY)

(Geography, Geology and Mathematics Building)

Head: Prunty. Staff: Ball, Barnes, Barrow, Burrill, Chapman, Heyl, Hoy, Kenyon, McGregor, Maxfield, Melvin, Schretter, Shear, Stone, Tuck, Woodruff.

HUMAN AND REGIONAL GEOGRAPHY

A major selected primarily from the following courses leads to an A.B. degree.

101. WORLD HUMAN GEOGRAPHY.

A world survey emphasizing population characteristics, environmental features, basic resources, economic activity and geopolitical problems within the major geographical regions.

H-115 (215). WORLD CULTURAL GEOGRAPHY (HONORS). (Not open to students with credit for Geography 101.)

World regional survey of population and cultural phenomena. Analysis of inter-actions between man and the land. Stress on conceptual basis for regionalization. Applications of principles in field trips.

341. PROBLEMS IN POLITICAL GEOGRAPHY.

Structure and function of political regions with emphasis on the sovereign state. Sources of national strength, cohesion, external conflict; examples from recent and contemporary world situations.

358. ECONOMIC GEOGRAPHY. Four lectures and one laboratory. Prereq: Geography 101 or 102, or Economics 105.

Distribution and development of production systems involving agriculture, minerals, forests, manufacturing; plus related transport and occupance systems. World patterns of resources utilization in relation to expanding populations.

436. GEOGRAPHY OF THE SOUTH. Prereq: Ten hours in courses from one of the following departments: Geography, History or Economics.

Geographical appraisal of the Southeastern States, including physical and human resources, settlement and population, agriculture, the extractive industries, transportation, and present urban settlements. Current progress and major problems in Southeastern development.

441. **CARIBBEAN AMERICA.** Prereq: Ten hours in Geography or an equivalent background in either Spanish or History.
A regional analysis of the geography of Caribbean Area with emphasis upon the cultural and economic ties of the American South with the Caribbean area.
442. **SOUTH AMERICA.** Prereq: Ten hours in Geography or an equivalent background in either Spanish or History.
A regional analysis of the geography of equatorial and southern South America including physical, cultural, and economic characteristics of the several regions. Stress upon prospects for expansion of settlements, developments of resources and growth of industries.
444. **EUROPE AND THE MEDITERRANEAN.** Prereq: Ten hours in Geography, or in History, Political Science, or Modern Languages.
A regional analysis of Europe, exclusive of the Soviet Union, designed to reveal the unique cultural, physical and economic character and problems of the several European nations.
446. **GEOGRAPHY OF THE SOVIET UNION.** Prereq: Ten hours in geography, or an equivalent background in History or Political Science or Modern Languages.
A regional analysis of the physical, ethnographic and economic geography of the U.S.S.R., designed to evaluate the industrial and political strength of the Soviet Union.
448. **GEOGRAPHY OF SOUTHEAST ASIA.** Prereq: Ten hours in geography, or an equivalent background in History or Political Science.
Regional analysis of cultural and physical geography of Southeast Asia including land utilization, settlement, raw material, population characteristics and distributions as they relate to economic and political problems. Emphasis on Japan, China, Philippines, and Indonesia.
450. **SOUTHWEST AND SOUTH CENTRAL ASIA.** Prereq: Ten hours in geography, or an equivalent background in History or Political Science.
A regional analysis of the geography of the Indian subcontinent and Southwest Asia. Emphasis on physical and human resources, settlement and economic development, and the strategic position of the region.
452. **GEOGRAPHY OF NORTHERN LANDS.** Prereq: Ten hours in Geography.
A description and analysis of the distribution of people, resources and occupations in the northern high latitude areas bordering the Arctic Ocean.
459. **NORTH AMERICAN URBAN GEOGRAPHY.** Prereq: Two courses from Geography 350, 358, or Economics 133.
Analysis of urban land occupancy and its morphological-functional aspects. Introductory location theory in urban areas. Procedures in geographical analysis of agglomerated settlements.
460. **NORTH AMERICAN INDUSTRIAL GEOGRAPHY.** Prereq: Geography 358.
Theories in industrial location. Detailed locational analysis of selected manufacturing industries. Regional treatment of the spatial structure of North American manufacturing.
461. **NORTH AMERICAN AGRICULTURAL GEOGRAPHY.** Prereq: Ten

hours from Geography 350, 358, 459, 460; or ten hours in 300-level courses from Economics, Botany or Agronomy approved by instructor.

Regional analysis of climate, soils, landform bases of American agriculture. Origins and dispersals of cultivated plants and livestock; American systems of rural land use and settlement in their regional settings. Contemporary land use problems.

463. GEOGRAPHY OF TRANSPORTATION. Prereq: Geography 358 or Marketing 559.

Survey of historical, engineering and economic aspects of North American transport. World regional assessment of transport facilities and commodity movements. Principles and theories explaining role of transportation in location of economic and political phenomena.

466. FIELD PROBLEMS IN URBAN GEOGRAPHY. Three laboratory periods. Prereq: Geography 350 and 459.

Field techniques in reconnaissance and analysis of urban areas.

468. URBAN TRANSPORTATION AND LAND USE. Prereq: Geography 459 or Marketing 559.

Reciprocal relations between urban transportation, both freight and passenger, and urban land use organization in terms of site requirements, traffic generation characteristics and circulation problems.

470. GEOGRAPHY OF RURAL SETTLEMENT. Prereq: Ten hours from Geography 350, 358 or 461; or (with consent of instructor) one 300-level course in Geography plus advanced background in either Economics, History, Political Science or Sociology.

Description and analysis of major patterns of rural settlement, and the primary processes of rural settling in representative world areas.

472. GEOGRAPHY OF WORLD POPULATION DISTRIBUTION. Prereq: Geography 350 and 358 or (with consent of the instructor) one 300-level course in Geography plus advanced background in either Economics, History, Political Science or Sociology.

A description of contemporary patterns in world and continental distributions of people and locational analyses of these patterns and their changes.

- 500 a, b. CONCEPTS AND MATERIALS IN GEOGRAPHY FOR TEACHERS. 3 hours each. Prereq: Graduate status plus two years teaching experience. Does not carry graduate credit for the M.A. or M.S. degrees. Evolution of the discipline, its current conceptual core; areal "element-complexes"; systematic vs. regional analytical procedures. Systems for derivation of field data; standard bibliographical, statistical cartographic and photogrammetric sources. Procedures in adapting information from the several sources to the classroom.

- 501, 502. PRINCIPLES IN REGIONAL GEOGRAPHY FOR TEACHERS. 5 hours each. Prereq: Ten hours in geography or two years of teaching experience.

Does not carry graduate credit for the M.A. or M.S. degrees. A course designed to inculcate principles and concepts in regional geography through intensive analysis of regions selected on a world-wide basis. Offered summer quarters.

533. GEOGRAPHY OF THE COMMUNITY. Prereq: Ten hours from the following courses; Geography 310 or 358, Sociology 431 or 435.

Analysis of structure and functional patterns of small and medium-sized American towns. Area differences in morphology of such settlements. Intended primarily for professional teachers and school administrators. Offered summer quarter only.

- 801. SEMINAR IN GEOGRAPHIC THOUGHT AND METHODS
- 803. SEMINAR IN NORTH AMERICAN LAND OCCUPANCE
- 830, DIRECTED PROBLEMS IN ECONOMIC AND CULTURAL
- 831, GEOGRAPHY.
- 832.
- 840, TOPICS IN REGIONAL GEOGRAPHY
- 841.
- 856. SPATIAL SYSTEMS AND LOCATION THEORY
- 860. SEMINAR IN ECONOMIC GEOGRAPHY
- 860A. URBAN GEOGRAPHY
- 860B. GEOGRAPHY OF TRANSPORTATION
- 860C. INDUSTRIAL GEOGRAPHY
- 870. SEMINAR IN THE GEOGRAPHY OF RURAL SETTLEMENT
- 872. SEMINAR IN GEOGRAPHY OF WORLD POPULATION DISTRIBUTION
- 944. (BUSINESS ADMINISTRATION) WORLD RESOURCES: PHYSICAL, TECHNOLOGICAL, HUMAN

Physical Geography

A major selected primarily from the following courses may lead to either the A.B. or B.S. degree.

- 104. EARTH SCIENCE SURVEY. (Not open to students with credit in either Geography 121 or 122.)
An introduction to physical geography, surveying climate, vegetation, soils, landforms, and water resources in their areal interrelations and distributions.
- H-114 (214). WORLD PHYSICAL GEOGRAPHY (HONORS). (Not open to students with credit for Geography 104 or 121-122.)
Study of processes of weather, climate and landforms; analysis of relationships among climate, landforms, vegetation, soils and water; assessment of broad patterns of these phenomena on the earth. Field observation provided in field trips.
- 121. INTRODUCTION TO LANDFORMS. Three lectures and two laboratory periods.
Introductory analysis and classification of major types of land surfaces, stressing geographic characteristics. Study and interpretation of relationships between landforms and other phenomena through maps and air photos. World coverage with stress on North America.
- 122. INTRODUCTORY WEATHER AND CLIMATE. Three lectures and two laboratory periods.

Components of weather, weather processes, and their measurement. Climatic elements and their control factors. Geographic classification of climatic and vegetative types on the earth's surface.

310. CONSERVATION OF NATURAL RESOURCES. Prereq: Geography 101, 104, or 121.

Resource management and conservation development in the United States. Resource utilization in terms of public policy and private management procedures.

350. CARTOGRAPHY AND GRAPHICS. Five laboratory periods.

Introduction to methods of preparing maps, charts and diagrams. Cartographic theory and techniques; use of basic cartographic equipment; compilation of, symbolization on and design of drawings; methods of map reproduction.

391. DIRECTED MAP AND PHOTOGRAMMETRIC COMPILATION. 3 hours. Three laboratory periods. Prereq: Geography 350 or 420.

Problems in producing maps from air photos and other sources. Obtaining and compiling data, and processing source materials. Writing specifications for drafting and reproducing drawings. Practice with advanced instruments.

400. ADVANCED TERRAIN ANALYSIS. Prereq: Geography 121, 350 and Mathematics 200.

Identification of terrain parameters, their quantitative expression and areal variations. Comparative examination of traditional and recent theories of terrain dynamics. Emphasis on small stream basin analysis.

401. ADVANCED CLIMATOLOGY. Four lectures and one laboratory period. Prereq: Ten hours in Geography including 122.

Intensive study of controlling factors of climate. Heat-balance, evapotranspiration, water-budget concepts. Koeppen classification system in detail. Regional analysis of climatic types and anomalies.

402. NORTH AMERICAN PHYSIOGRAPHY. Two lecture and three laboratory periods. Prereq: Geography 121 plus either Geography 122 or Geology 125.

Detailed analysis of North American physiographic provinces, their subdivisions, geomorphic features, geographic relationships. Terrain morphometrics, topographic maps, air photos, field work, semi-independent reports.

404. (FORESTRY) WATERSHED HYDROLOGY. Three lectures and two laboratory periods. Prereq: Physics 127, 128, and Geography 122.

General hydrology as based on the hydrologic cycle, with emphasis on the role of soils, vegetation, physiography and the microclimate on processes of precipitation, runoff, erosion and landforming. Problems of measurement and regulation of streamflow, groundwater, soil moisture and precipitation.

406. SYNOPTIC AND OBSERVATIONAL METEOROLOGY. Three lecture and two laboratory periods. Prereq: Geography 122 plus either Physics 128 or 138.

Study and practice in meteorological observational procedures. Analysis of upper air and surface maps; the prognosis and forecasting problem.

420. USE AND INTERPRETATION OF AERIAL PHOTOGRAPHS. Five laboratory periods. Prereq: Four or more quarters of forestry or agriculture, or Geography 350, or permission of instructor.

Principles of air photo interpretation and photogrammetry. Use of photos and photogrammetric instruments in planimetric, topographic and type mapping; in remote-sensing; in making measurements and inventories; in sampling; and in planning. Emphasis on interpretation of terrain, vegetation and culture.

422. ADVANCED PHOTOGRAMMETRY LABORATORY. Five laboratory periods. Prereq: Geography 420 or equivalent.
Directed laboratory work on photogrammetric problems related to the interests of individual students. Mastery of advanced photogrammetric instruments.
425. FIELD METHODS IN GEOGRAPHY. 3 hours. Prereq: 15 hours in geography courses numbered above 200 including Geography 350, plus at least a B average in junior-senior major courses.
Methods of measurements, observation, recording, and synthesis of field data. Field analysis of all features in one small type-area required, including completed maps and written report in which recorded data are correlated and synthesized. Required for all graduate majors.
429. SPECIAL PROBLEMS IN AREA ANALYSIS. 3 hours. Prereq: Fifteen hours in courses numbered above 300 in Geography. Approval of instructor concerned, and head of department, must be obtained for admission to this course prior to registration.
476. VEGETATION OF NORTH AMERICA. (BOTANY 476).
802. QUANTITATIVE METHODS OF AREA ANALYSIS
- 812, PROBLEMS OF CLIMATE AND WATER RESOURCES
813,
814.
- 816, PROBLEMS IN GEOMORPHOLOGY
817,
818.
821. ADVANCED PROBLEMS IN CARTOGRAPHY

Geology (GLY)

(Geography, Geology and Mathematics Building)

Head: Hurst. Staff: Allard, Carver, Durisek, Frye, Giardini, Henry, Howard, Hoyt, Lefebvre, Long, Radcliffe, Ramspott, Rich, Salotti, Stanley, Voorhies.

125. ELEMENTS OF GEOLOGY (PHYSICAL). Three lectures and two laboratory periods.
Fundamentals of physical geology. Nature and origin of minerals and rocks. Agents of erosion, development of land forms, sedimentation, vulcanism, metamorphism, origin of mountains.
126. ELEMENTS OF GEOLOGY (HISTORICAL). A continuation of Geology 125. Three lectures and two laboratory periods.
Methods by which earth history is interpreted. Geologic history of North America by areas. Time scale. Evolution of plant and animal kingdoms.

- H-135 (235). **PHYSICAL GEOLOGY (HONORS)**. Three lectures and two laboratory periods. Not open to students with credit in Geology 125.
Physical properties, identification and origin of minerals. Classification and origin of rocks. Physical processes that shape the earth; gradation, deposition, vulcanism, glaciation, weathering, rock deformation, mountain building, and metamorphism. Geologic maps. Mineral resources.
- H-136 (236). **HISTORICAL GEOLOGY (HONORS)**. Three lectures and two laboratory periods. Not open to students with credit in Geology 126.
Age of the earth; geologic time scale. Fossils, evolution and faunal succession. Organizing the stratigraphic record. History of the earth as recorded in rocks. Evolution of North America and the development of life on earth.
301. **GEMS AND GEM MATERIALS**. Five lectures.
Gem materials; historical, cultural, mineralogical, technological and scientific aspects. The identification and evaluation of gems.
320. **DETERMINATIVE MINERALOGY**. 3 hours. Three laboratory periods.
Prereq: Geology 125 and Chemistry 121.
Systematic identification and classification of minerals, their rock-associations, modes of occurrence. Procedures in mineralogical analysis.
321. **INTRODUCTION TO MINERALOGY AND CRYSTALLOGRAPHY**.
Two lecture and three laboratory periods. Prereq: Geology 125, Chemistry 121.
Physical and chemical properties of minerals, their rock-associations, modes of occurrence, industrial uses. Properties of crystals, crystal systems and geometrical characteristics.
323. **PETROLOGY**. Two lecture and three laboratory periods. Prereq: Geology 320 or 321.
Characteristics of the common igneous, sedimentary, and metamorphic rocks. Their classification and field identification.
332. **STRUCTURAL GEOLOGY**. Two lecture and three laboratory periods.
Prereq: Geology 125 or equivalent. Mathematics 253 recommended.
Geologic structures and their recognition in the field. Framework of the earth's crust; origin of mountains, continents, oceans. Physical properties and behavior of rocks; solution of structural problems.
403. **INVERTEBRATE PALEONTOLOGY**. Three lectures and two laboratory periods. Prereq: Geology 126 and Zoology 225 or approval of instructor.
Study of fossil invertebrates emphasizing relationships in anatomical structures of living and extinct types. Classification. Geologic history of all invertebrate phyla.
405. **SEDIMENTATION AND STRATIGRAPHY**. Two lectures and three laboratory periods. Prereq: Geology 125. Geology 321 recommended.
The origin and distribution of sedimentary rocks. Environmental conditions involved in the transportation and deposition of sediments. Vertical sequences and lateral correlations in layered rocks. Typical stratigraphic associations.
407. **GEOLOGY OF THE SOUTHERN STATES**. Prereq: Geology 125-126.
Three lectures and two laboratory periods.
Structural and stratigraphic relationships in southern geology analyzed in terms of distribution, lithology, and their economic implications.

408. **OPTICAL MINERALOGY.** Three lectures and two laboratory periods. Prereq: Geology 321 or equivalent.
The optical properties of minerals. Determination of minerals with the polarizing microscope. Introduction to universal stage techniques, point count, etc., and stain methods.
409. **MARINE GEOLOGY.** Five lectures. Prereq: Geology 405, or Geology 125-126 and 10 hours of biological science.
Structure, physiography. Marine sediments and processes. Problems in marine geologic research.
410. **SEDIMENTARY PETROLOGY.** 3 hours. Three laboratory periods weekly. Prereq: Geology 405 and 408.
Megascopic and microscopic petrologic examination of sedimentary rocks. Relationships of their properties to environments during deposition; post-depositional history of the rocks.
411. **PRINCIPLES OF GEOCHEMISTRY.** 3 hours. Three lectures. Prereq: Chemistry 122, Physics 128, Geology 323.
Composition of the earth. Distribution of elements in minerals and rocks. Principles governing the migration and concentration of elements. Introduction to nuclear geology and geochemical prospecting.
412. **PALYNOLOGY.** Three lectures and two laboratory periods. Prereq: Geology 126, Botany 122, or approval of instructor.
The application of pollen and spore analysis to geological, botanical, ecological, aerobiological, archeological studies with practical experience in extraction, identification and interpretation of pollen and spore diagrams.
413. **PALEOBOTANY.** Three lectures and two laboratory periods. Prereq: Geology 126, Botany 122 or approval of instructor.
Phylogeny and taxonomy of fossil plants with emphasis on their use in stratigraphic, paleoclimatic and paleoecological studies.
414. **CRYSTALLOGRAPHY (MORPHOLOGICAL AND X-RAY).** Three lectures and two laboratory periods. Prereq: Mathematics 254, Physics 128.
Symmetry elements, crystal projections, point groups, space groups, crystal systems, crystal notation, optical goniometry. Determination of cell dimensions and space group; X-ray powder methods, single crystal X-ray methods.
422. **HYDROGEOLOGY.** 5 hours. Prereq: Geology 125 and one of the following: Geology 126, Aen. 325, Aen. 356, Forestry 351, Forestry 404.
Permeability and porosity of geologic materials; soil water; quality and movement of ground water; quantitative methods in ground water studies; the chemistry of surface and ground waters. Physical control of surface and sub-surface flow.
425. **FIELD METHODS IN GEOLOGY.** 3 hours. Prereq: 15 hours in geology courses numbered above 200 plus at least a B average in junior-senior major courses.
Geological field methods in preparation of geological maps.
426. **GEOLOGIC MAPPING OF SAPROLITE.** 3 hours. Prereq: 15 hours in geology courses numbered above 200.
The weathering processes of saprolitization. The recognition of parent rock

by the field examination of saprolite. Geologic mapping in deeply weathered terrains.

430. CLAY MINERALOGY. 4 hours. Two lectures and two laboratory periods. Prereq: Geology 405 and Chemistry 223 or Geology 321 and Chemistry 280. Structure and properties of clay minerals. Effects of environmental factors on their origin and uses. Identification of clay minerals by optical and X-ray methods.
500. GEOLOGY FOR TEACHERS. Lecture and demonstration. Five hours each week. Prereq: 20 hours physical and/or biological sciences, at least 5 of which must be chemistry. Graduate credit will be limited to candidates for the Master of Education degree. Not open to geology majors. Cultural and practical aspects of earth study. Identification of common rocks and minerals. Geologic principles and processes; outline of earth's history.
501. PRINCIPLES OF SCIENCE FOR TEACHERS—EARTH SCIENCE. Three 2-hour lecture-demonstration class sessions and two 2-hour laboratory sessions each week, and a full-day trip on alternate weeks. This course in earth science is designed specifically for elementary and junior high school teachers in science. Not open to geology majors.
805. ADVANCED STRATIGRAPHY
810. PETROGRAPHY AND PETROLOGY OF IGNEOUS ROCKS
811. PETROGRAPHY AND PETROLOGY OF SEDIMENTARY ROCKS
812. PETROGRAPHY AND PETROLOGY OF METAMORPHIC ROCKS
815. SPECIAL PROBLEMS IN SEDIMENTOLOGY AND OCEANOGRAPHY
816. ADVANCED PETROLOGY
817. ADVANCED PETROLOGY
818. ADVANCED PETROLOGY
820. GEOTECTONICS
930. THESIS

Germanic and Slavic Languages

Head: Steer. Staff: Barrick, Cobb, Ehm, Johnson, Rogers.

A student continuing a language taken in high school will be placed in the appropriate course on the basis of scores on the College Entrance Examination Board Scholastic Achievement Tests and other pertinent information.

No student may receive credit for any course which is a prerequisite to a course for which he has already received college credit. Exception may be made only by the head of the department.

A student who has satisfied the language requirement for his degree in one foreign language may count the courses taken during his junior and senior years in any other foreign language, regardless of course numbers, towards his senior division requirements.

German (GER)

Any course numbered below 200 is considered elementary and will not count toward the minimum of 20 hours required to major in language.

101. **ELEMENTARY GERMAN.** 10 hours.
102. (Students in this course may be required to spend a minimum of one hour a week outside of the class in the language laboratory.) Fundamentals of grammar, pronunciation, conversation, composition, reading, and translation.
103. **INTERMEDIATE GERMAN.** Prereq: German 102 or two entrance units in German.
Grammar review, reading and translation of intermediate texts, composition, and conversation.
104. **INTERMEDIATE GERMAN.** Prereq: German 103.
Extensive readings in modern German prose, composition and conversation.
120. **TECHNIQUES OF TRANSLATION.** Prereq: German 103 or its equivalent.
Review of grammar, idioms, and vocabulary; practice in translating moderately difficult technical and non-technical German texts into correct English.
- *201. **INTRODUCTION TO GERMAN LITERATURE.** Prereq: German 104.
A study of representative works of German literature in the nineteenth century.
- *202. **INTRODUCTION TO GERMAN LITERATURE.** Prereq: German 104.
A study of the main literary movements and major works of representative German writers of the twentieth century.
210. **ADVANCED CONVERSATION AND COMPOSITION.** Prereq: German 104.
Three recitations and two double periods for oral practice each week.
430. **THE GERMAN DRAMA OF THE NINETEENTH CENTURY.** Prereq: German 201 and 202 or by special permission of the instructor.
A study of the development of German drama in the nineteenth century; reading of selected plays from the period, including Kleist, Grillparzer, Hebbel, Eunchner, Grabbe.
431. **THE GERMAN NOVELLE OF THE NINETEENTH CENTURY.** Prereq: German 201 and 202 or by special permission of the instructor.
The development of the German Novelle from Romanticism to Realism.
432. **INTRODUCTION TO GOETHE.** Prereq: German 201 or 202.
Study of Goethe's life, with lectures, reports and readings from his poems, novels, and plays other than Faust.
433. **GOETHE'S FAUST.** Prereq: German 201 and 202 or by special permission of the instructor.
Reading and interpretation of Part I of Faust.
436. **GERMAN ROMANTICISM.** (In translation). Prereq: 201 or 202.
A study of the Romantic Period of German literature.
439. **THE GERMAN LYRIC.** Prereq: German 201 and 202 or special permission of instructor.

*May be taken in lieu of 104 to satisfy degree requirements when 104 is not offered.

A study of German lyrics and ballads from the time of the Minnesingers to the present.

Russian (RUS)

101. **ELEMENTARY RUSSIAN.** 10 hours.
 102. Grammar and composition, conversation, reading and dictation.
 103. **INTERMEDIATE RUSSIAN.** Prereq: Russian 102.
 Intermediate grammar, reading, conversation, dictation, and composition.
 104. **RUSSIAN GRAMMAR, COMPOSITION, AND CONVERSATION.**
 Prereq: Russian 103.
 Advanced grammar, reading, oral and written composition, conversation, dictation.
 401. **INTRODUCTION TO MODERN RUSSIAN LITERATURE.** (in translation). Prereq: 10 credits from among the following: English 121-122, French 201-202, German 201-202, Spanish 201-202, Italian 201-202, or 25 hours of foreign language including not less than 15 hours of Russian.
 A survey of the golden age of Russian literature (first half of the 19th century) with emphasis on poetry and the drama. Reading, in translation, of representative works of Pushkin, Lermontov, Gogol, Griboedov, and Goncharov, and of selections from the works of lesser writers. Students who have studied the Russian language are required to read certain selections in the original.
 402. **INTRODUCTION TO MODERN RUSSIAN LITERATURE.** (in translation). Prereq: 10 credits from among the following: English 121-122, French 201-202, German 201-202, Spanish 201-202, Italian 201-202 or 25 hours of foreign language including not less than 15 hours of Russian.
 A survey of Russian prose literature between 1850-1917. Reading, in translation, of representative works by Dostoevski, Turgenev, Chekhov, Tolstoi, and Gorki, and of selections from the works of lesser writers. Students who have studied the Russian language are required to read certain selections in the original.

Greek (GRK)

(See Classics)

History (HIS)

(LeConte Hall)

Head: Parks. Staff: Alexander, Berrigan, Broussard, Coleman, Crowe, Cunningham, Draughn, Gatewood, Heggoy, Herndon, Jones, Lacy, Long, McPherson, Montgomery, Murdoch, Nichols, Patrick, Piper, Rader, Shanks, Smith, Spalding, Tresp, Vinson, Wynes, Vogt.

All students receiving a degree from the University of Georgia are required to pass an examination on the history of the United States and Georgia (given at the beginning of the freshman year) unless credit is presented in (1) History 100 or (2) History 251-252 or (3) History 459 and one other course in American History.

100. SURVEY OF AMERICAN HISTORY. (Not open to students who have credit for either History 251 or History 252).

This course is designed to satisfy the state law requiring that all students receiving degrees shall pass an examination on the history of the United States and of Georgia. May be used as free elective only.

- 111, HISTORY OF WESTERN CIVILIZATION. 10 hours (5 hours in each of
112. two quarters).

- H-115, HISTORY OF WESTERN CIVILIZATION (HONORS). 10 hours. (5
H-116. hours in each of two quarters).

H-115 is not available to students who have had 111, and H-116 is not available to students who have had 112. Taught in seminar fashion, with extensive outside reading in primary and secondary sources. Emphasis on social, economic, and intellectual history.

- 251, AMERICAN HISTORY. 10 hours (5 hours in each of two quarters).
252. An interpretation of the development of the American nation from the age of discovery to the present. Either course may be taken for final credit.

- 341, ENGLISH HISTORY. 10 hours (5 hours in each of two quarters, either
342. quarter elective for final credit, though it is recommended that the whole course be taken).

A survey of English history from the earliest times to the present. The division point in the two parts of this course is 1660. Especially recommended to pre-law students and those interested in English literature.

- H-353, HISTORY OF THE UNITED STATES, 1500-1865 (HONORS).

- H-354. HISTORY OF THE UNITED STATES, 1865 TO THE PRESENT.
(HONORS). 10 hours. (5 hours each of two quarters).

H-353 not open to those who have had 251, and H-354 not open to those who have had 252. Taught in seminar fashion, with extensive outside readings in primary and secondary sources. Emphasis on social, economic, and intellectual history.

358. A SURVEY OF AMERICAN DIPLOMACY.

A survey of American objectives and policies in foreign affairs from Colonial times to the present.

361. COLONIAL AND REVOLUTIONARY AMERICA.

This course considers exploration and settlement of the English Colonies in North America and the development of colonial life through a blending of European backgrounds and American environment. Formation of colonial discontent, revolutionary war, and formation of new nation after independence are included.

362. FROM JEFFERSON TO THE CIVIL WAR.

This course covers the period in American history from the election of Thomas Jefferson in 1800 to the election of Abraham Lincoln in 1860. The development of the political, social, and economic factors is traced.

371. MEDIEVAL AND EARLY MODERN EASTERN EUROPE, 395-1699.

A broad survey covering Byzantine history, the Balkan Slavs and the Russians,

the rise of Hungary, Bohemia, and Poland, and the Germanic *Drang nach Osten*.

372. **RUSSIA AND EAST CENTRAL EUROPE SINCE 1699.**

The rise of Russia in East Central Europe at the expense of Sweden, Poland, and later, of Germany and Austria-Hungary, culminating in the triumph of Communism two decades ago.

381. **FAR EASTERN CIVILIZATION.** 10 hours. (5 hours each of two quarters

382. Either course may be taken for final credit).

A survey of East Asian civilization from their beginnings to the present. Division point in two courses will be about 1800.

391. **LATIN AMERICAN CIVILIZATION.** 10 hours (5 hours each of two

392. quarters. Either course may be taken for final credit).

A survey of Latin American history and culture from pre-conquest times to the present. Division point in two courses will be about 1800.

405. **CONSTITUTIONAL HISTORY OF THE UNITED STATES.**

A study of how actual political and social conditions in American history have produced fundamental constitutional principles and practices.

406. **AMERICAN SOCIAL AND INTELLECTUAL HISTORY OF THE COLONIAL AND FORMATIVE PERIODS.**

A review of concepts and attitudes in their social framework, beginning with European heritage and continuing through adaptations to frontier environment.

407. **AMERICAN CULTURAL HISTORY SINCE THE MID-NINETEENTH CENTURY.**

A study of the principal developments in American philosophy, science, literature and art.

415. **THE WESTWARD MOVEMENT 1750-1841.**

A survey of American political, social, and economic institutions as they develop in frontier areas. The impact of the frontier upon these institutions and the American people as they move west will be discussed.

416. **THE TRANS-MISSISSIPPI WEST.**

This course will be a survey of American political, social, and economic institutions as they develop in the region west of the Mississippi River. The impact of the frontier upon these institutions and upon the American people as they move west will be discussed.

420. **NINETEENTH CENTURY EUROPE.**

A history of Europe from 1814 to 1914. The main political international, social, economic, cultural, and intellectual movements will be stressed.

425. **ANCIENT HISTORY.**

A survey of the ancient peoples and cultures of the Near East from earliest historical times through the Persian Empire.

426. **GREEK HISTORY.** (Classics).

A study of Greek history through the time of Alexander the Great.

427. **ROMAN HISTORY.** (Classics).

A study of Roman history to the dissolution of the empire.

430. **THE AGE OF WORLD WAR I, 1890-1924.**
The origins of modern world politics, culminating in World War I and the peace settlement of 1918-24. The interaction between world politics and the 20th century ideologies—welfare—state democracy, fascism, and communism—and the intellectual and technological roots of these ideologies.
431. **THE AGE OF WORLD WAR II AND THE COLD WAR.**
A continuation of History 430/630. The rise of Nazi Germany and Soviet Russia as world powers and the origins of World War II. The bi-polar world politics of the 1940's, and the more complicated world politics produced in the 1950's by the rise of the non-Western world.
432. **THE RISE OF THE RUSSIAN EMPIRE TO 1725.**
A brief survey of Russian history up to 1461, with primary attention focused on the Muscovite period between Ivan the Great and Peter the Great. Foreign affairs and internal development, including the Westernization process, will receive approximately equal attention.
433. **PETRINE RUSSIA, 1725-1881.**
The St. Petersburg period of Russian history to the assassination of Alexander II and the rise of the generation which created Soviet Russia. The waxing and waning of Russian influence in world affair will be interpreted in the light of basic changes in domestic policy after the French Revolution.
434. **THE RUSSIAN REVOLUTION AND THE RISE OF STALIN, 1881-1927.**
The final phase of the Russian revolutionary movement and the collapse of the empire under the impact of the wars of 1904-05 and 1914-17. The Civil War of 1917-21, and the period of the New Economic Policy.
435. **HISTORY OF WORLD COMMUNISM SINCE 1917.**
The Soviet Russia of Lenin, Stalin, and Khrushchev in a world setting. Prime emphasis will be given to the conflict between the Marxist-Leninist ideology of 1917-27 and the actual structuring of the Soviet state and of the Communist Bloc by Stalin. The post-Stalin period will be covered in terms of both internal change in the Soviet Union and the rise of poly-centrism in the Communist world.
440. **THE SOUTH SINCE RECONSTRUCTION.**
The South since the Reconstruction Period with emphasis upon social, economic, and political developments of the region.
445. **HISTORY OF NORTH AFRICA: A SURVEY.**
North African History from pre-history to present. Phoenician, Greek, Roman, Muslim, Turkish and European attempts to colonize the Maghrib will be analyzed as will political systems that develop in geographical area of Morocco, Algeria, Tunisia and Libya.
446. **NORTH AFRICA: EUROPEAN PENETRATION AND THE COLONIAL PERIOD.**
Attention centered on diplomatic problems raised by contacts between European powers and North Africa. Colonial settlement and colonial history will be discussed.

447. NATIONALISM IN NORTH AFRICA AND THE PROBLEMS OF NEW POWER.

The course will begin with a study of the origins of nationalism in Morocco, Algeria, Tunisia and Libya. Attention given to problems involved in gaining independence, of setting up new governments, and of independently meeting difficulties that were earlier dealt with by the colonial powers.

451. THE AMERICAN COLONIES.

A study of the early settlements made in North America by the English, French, Spanish, and Dutch; and how these European peoples made an American society by adapting old world forces to a new world environment. The course ends with the French and Indian War of 1763.

452. THE REVOLUTION AND THE RISE OF THE AMERICAN NATION.

This course covers the period of American history from 1763 to 1800, which includes the Revolution, its causes and results; the Articles of Confederation; the writing and adoption of the Federal Constitution; and the administration of George Washington and John Adams.

454. THE CIVIL WAR PERIOD OF AMERICAN HISTORY.

Special attention will be given to the civilian activities of the people, and to the problems of the Northern and Southern governments. Emphasis will be placed on the Confederacy. Only the major military campaigns will be considered.

455. THE RECONSTRUCTION PERIOD.

The reconstruction of the South along all lines as well as the remaking of the North will be taken up in this course. Beginnings will be found during the Civil War and the process will be continued to 1877.

456. RECENT AMERICAN HISTORY, 1877 to 1900.

Beginning with the presidency of Rutherford B. Hayes, this course will continue through the administration of William McKinley. Politics will be overshadowed by the social and economic picture.

457. THE ANTE-BELLUM SOUTH.

This course begins with the late colonial period, when settlers were pushing across the Southern Appalachians, and continues to the secession of the South. All aspects of Southern life and civilization will be studied.

459. HISTORY OF GEORGIA.

A study of Georgia from its first occupation by the Spaniards down to the present. A comprehensive discussion of all aspects of Georgia's development.

461. FRANCE IN THE NINETEENTH AND TWENTIETH CENTURIES.

A survey of political, social, and economic developments in France and the French colonial empire since the fall of Napoleon I. Domestic events will be stressed rather than foreign or military affairs. As much attention as possible will be given to literary and other cultural developments.

462. GERMANY IN THE NINETEENTH AND TWENTIETH CENTURIES.

A survey of political, social and cultural developments in Germany since 1800. Domestic events will be stressed. Much attention will be given to literary and intellectual development.

463. GERMANY SINCE 1930.

A study of contrasts between Hitler Germany and Germany since World War II.

466. **THE BRITISH EMPIRE AND COMMONWEALTH SINCE 1496.**
A survey of British empire and commonwealth problems from the fifteenth century to the present.
467. **THE ANGLO-AMERICAN TRADITION IN WORLD AFFAIRS.**
As a background for the study of current events, this course examines the Anglo-American tradition of self-government and its extension to Latin America, Far East, Southwest Pacific, South-Southeast Asia, Africa, and Middle East.
472. **MEDIEVAL ENGLAND, 1066-1485.**
A detailed study of English political, social, economic, and intellectual life from the Norman Conquest through the Wars of Roses.
473. **THE TUDOR PERIOD OF ENGLISH HISTORY, 1485-1603.**
England's emergence as a modern state. Constitutional, economic, social and intellectual process, her part in the Renaissance and Reformation, and her increasing international significance.
474. **THE STUART PERIOD OF ENGLISH HISTORY, 1603-1714.**
England during the evolution of parliamentary supremacy; the early Stuarts, Civil War, Interregnum, Restoration, and Glorious Revolution. Constitutional development is stressed and economic, social and intellectual aspects are included.
475. **CONSTITUTIONAL HISTORY OF ENGLAND.**
A survey of the British constitutional developments from earliest times to the present, noting especially the growth of the common law, the court system, and the cabinet form of government. Recommended particularly for pre-law students.
477. **MEDIEVAL EUROPE.**
The history of Europe from the Fall of Rome to the Renaissance. The topics covered include the barbarian invasions, the growing power of the Church and its struggle with the temporal rulers, feudalism, the Crusades, as well as the social and literary development during the period.
478. **THE RENAISSANCE AND REFORMATION.**
A study of the transition from medieval conditions with emphasis on the social, economic and cultural changes of the Renaissance and the great religious upheaval of the sixteenth century.
479. **ENGLAND IN THE 18TH CENTURY, 1714-1815.**
England under the early Hanoverians; emergency of the Cabinet System, and party politics; agrarian and industrial revolutions; growth of Empire; the French wars.
483. **MODERN CHINA.**
The impact of the West on traditional Japanese institutions, with major attention to the internal history of China from the middle of the nineteenth century to the present.
484. **MODERN JAPAN.**
The impact of the West on traditional Japanese institutions, with major attention to the internal history of Japan from the middle of the nineteenth century to the present.

485. THE AGE OF ABSOLUTISM.

Europe from 1648 to 1789, with particular emphasis upon France. The political history of the age will be supplemental by examination of economic and social institutions and the Enlightenment. Reading knowledge of French is required.

486. THE FRENCH REVOLUTION AND NAPOLEON.

Europe from 1789 to 1815, centering upon the events in France. Stress is placed upon the political, diplomatic and military history of the era. Reading knowledge of French is required.

487. SPAIN AND PORTUGAL SINCE 1700.

A survey of political, social and economic development of Spain and Portugal from 1700 to the present, with emphasis on the period since World War I and on contemporary colonial problems.

488. INTER-AMERICAN PROBLEMS.

A study of economic, social and political problems of Latin America since Independence and cooperative efforts of the United States in trying to reach solutions within the framework of the Pan American movement and the Organization of American States.

489. LATIN AMERICA IN THE TWENTIETH CENTURY.

A study of twentieth century influences that are producing socio-economic unrest in much of Latin America and also of efforts of the United States and private organizations to combat the spread of these conditions.

490. GOLDEN AGE OF SPAIN AND PORTUGAL, 1300-1700.

A survey of political, social and cultural development of Spain and Portugal from crusade against the Moors to the end of the Hapsburg dynasty, including colonial expansion into North Africa.

493. THE CARIBBEAN AREA.

Conquest and settlement of the islands and Caribbean periphery by the Spanish, the intrusions by the French, Dutch, and English, and the more recent developments of the nineteenth and twentieth centuries.

494. A.B.C. POWERS.

The history of the political, economic, social and cultural development of Argentina, Brazil, and Chile since the struggle for independence with a brief summary of the late colonial period.

496. RECENT AMERICAN HISTORY, 1900-1950.

Special emphasis will be placed on domestic politics and cultural developments. American diplomacy will be excluded.

497. CULTURAL HISTORY OF THE SPANISH AMERICAN COLONIES.

The central theme will be the effort of Spaniards to transplant their culture in the New World. Special attention will be given to Spain's Indian policy, the theory of colonial government, the development of universities, the reception of the Enlightenment, and to colonial literature.

498. ORIGIN OF INDEPENDENCE IN THE SPANISH COLONIES.

Emphasis will be placed on the influence of the Enlightenment, the impact of the American and French revolutions, the efforts of the precursors, and on the revolutionary activity in each of the colonies.

500. **THE ANGLO-AMERICAN TRADITION IN WORLD AFFAIRS.**
Primarily for secondary school teachers interested in study of world struggle of United States and Soviet Union, but other students, except candidates for M.A. and Ph.D. in History, may enroll. Anglo-American tradition of self-government and its extension to Latin America, Far East, Southwest Pacific, South, Southeast Asia, Africa, and Middle East.
800. **HISTORICAL METHOD**
801. **STUDIES IN AMERICAN HISTORY**
802. **AMERICAN HISTORIOGRAPHY**
807. **THE AGE OF JACKSON**
830. **STUDIES IN MODERN EUROPEAN HISTORY**
835. **EUROPEAN DIPLOMACY, 1890-1923, AND THE RUSSIAN REVOLUTION**
854. **THE CONFEDERATE STATES OF AMERICA**
858. **THE UNITED STATES BETWEEN TWO WARS, 1919-1939**
865. **STUDIES IN HANOVERIAN BRITAIN, 1714-1815**
870. **THE AGE OF REFORM IN GREAT BRITAIN, 1815-1870**
875. **MODERN BRITISH DIPLOMACY**
885. **STUDIES IN THE RECENT HISTORY OF THE FAR EAST**
894. **STUDIES IN LATIN AMERICAN HISTORY**
897. **PROBLEMS IN DIPLOMATIC HISTORY, 1776-1898**
898. **PROBLEMS IN U.S. DIPLOMATIC HISTORY, 1898-1957**

Mathematics (MAT)

(Geography, Geology and Mathematics Building)

Head: Ball. Staff: Adomian, Alford, Baker, Brahana, Cantrell, Collins, Daughtry, Edwards, Feaux, Halvorsen, Hardy, Harley, Hinton, Horne, Horvatic, Huff, Jewett, Johnson, McCord, Mooney, Nigam, Penney, Rice, Roach, Robinson, Saade, Schaufele, Sher, Stanley, Vobach, Wardlaw, Woodward.

99. **REMEDIAL COURSE IN ALGEBRA.** No Credit.
A course designed for students who have had insufficient high school preparation to enter Mathematics 100 or who for other reasons are deficient in their mathematics; devoted to drill on elementary and intermediate algebra; meets five times a week.
100. **COLLEGE ALGEBRA.** Prereq: At least two units of high school mathematics including one year of algebra.
The number system, absolute values, inequalities, functions, graphs, exponents and logarithms.
101. **TRIGONOMETRY AND ALGEBRA.** Prereq: Mathematics 100.
Analytic trigonometry and some study of algebra beyond the level of Mathematics 100.
235. **FINITE MATHEMATICS.** Prereq: Mathematics 100.

An introduction to modern ideas in mathematics. Compound statements, sets and subsets, probability theory, vectors and matrices, application to the social sciences.

253. ANALYTIC GEOMETRY AND CALCULUS. Prereq: Mathematics 100 and either Mathematics 101 or consent of instructor.
Analytic geometry and introductory differential calculus.

254. CALCULUS. Prereq: Mathematics 253.
Introductory integral calculus.

255. CALCULUS. Prereq: Mathematics 254.
Applications of the calculus, infinite series, and advanced analytic geometry.

256. CALCULUS. Prereq: Mathematics 255.
Vectors, differential calculus of functions of several variables, vector differential calculus. Required of majors in mathematics.

H-263. MODERN MATHEMATICS ANALYSIS (HONORS). Prereq: Credit for or exemption from both Mathematics 100 and Mathematics 101.
A study of analytic geometry and calculus roughly parallel to that in Mathematics 253, but with greater depth and more abstraction.

H-264. CALCULUS (HONORS). Prereq: Mathematics H-263 or consent of instructor.
The usual topics of integral calculus are treated with more depth than in Mathematics 254.

H-265. CALCULUS (HONORS). Prereq: Mathematics H-264 or consent of instructor.
The material covered in Mathematics 255, presented with greater depth and more abstraction.

401. DIFFERENTIAL EQUATIONS. Prereq: Mathematics 255.
Elementary differential equations with applications to geometry and physics.

403. NUMERICAL ANALYSIS I. Prereq: Mathematics 255 and Computer Science 301.

404. NUMERICAL ANALYSIS II. Prereq: Mathematics 403-603.

414. INTRODUCTION TO SET THEORY. Prereq: Mathematics 256 or consent of instructor.
The algebra of sets, cardinal numbers, relations and functions, the real number system, and the topology of metric spaces.

415. INTRODUCTORY TOPOLOGY. Prereq: Mathematics 414.
An introductory course in point set topology with emphasis on geometric aspects.

416. INTRODUCTORY TOPOLOGY. Prereq: Mathematics 415.
A continuation of Mathematics 415.

431. THEORY OF NUMBERS. Prereq: Mathematics 255.
An elementary course in number theory.

440. INTRODUCTION TO HIGHER ALGEBRA. Prereq: Mathematics 255.
Linear algebra and matrix theory. Required of majors in Mathematics.

441. INTRODUCTION TO HIGHER ALGEBRA. Prereq: Mathematics 440. Theory of equations, polynomials, and determinants. Topics in modern algebra.
442. INTRODUCTION TO HIGHER ALGEBRA. Prereq: Mathematics 441. Matrices, invariants, theory of elimination. Additional topics in modern algebra.
444. SYMBOLIC LOGIC (PHILOSOPHY).
- 454, 455. AN INTRODUCTION TO THE FOUNDATIONS OF ANALYSIS. 10 hours. Prereq: Mathematics 414.
An introductory course in real analysis. Continuous functions, differentiation and Riemann integration; sequences and series of functions; measure theory, Lebesgue integration, and Fourier series.
458. ADVANCED CALCULUS. Prereq: Mathematics 256.
Integral calculus of functions of several variables, vector integral calculus, infinite series.
459. ADVANCED CALCULUS. Prereq: Mathematics 458.
Fourier series and orthogonal functions, ordinary and partial differential equations.
462. PROJECTIVE GEOMETRY. Prereq: Mathematics 255.
The algebra of homogeneous co-ordinates; duality; cross-ratio; classification of projective transformations; configurations of lines and points; the conic.
464. INTRODUCTION TO METAMATHEMATICS (PHILOSOPHY).
470. THEORY OF PROBABILITY. Prereq: Mathematics 255.
A rigorous and precise treatment of basic probability theory.
502. BASIC IDEAS OF ARITHMETIC. Prereq: Mathematics 100; Education 103, 304, 335, 336 or two years of teaching experience. Cannot be used as part of the major of 40 hours.
Designed to give elementary teachers a clear understanding of the fundamental ideas of arithmetic. Operations on arithmetic will be studied in several number systems.
503. BASIC IDEAS OF ALGEBRA AND GEOMETRY. Prereq: Mathematics 502. Cannot be used as part of the major of 40 hours.
A continuation of Mathematics 502 designed to give elementary teachers a clearer understanding of some of the important ideas of algebra and geometry.
510. FUNDAMENTAL IDEAS OF ALGEBRA. Prereq: for graduate credit: Mathematics 100-101 and either two mathematics courses numbered over 200 or two years of teaching high school algebra.
A course designed to help teachers of high school algebra. It will stress those fundamental ideas, some of which are modern, which determine the structure of elementary algebra.
512. COLLEGE GEOMETRY. Prereq: for Graduate Credit: Mathematics 100-101 and two years of teaching high school geometry.
A course in more advanced elementary geometry especially designed for prospective teachers of secondary school mathematics.
514. ELEMENTARY SET THEORY FOR TEACHERS. Prereq: Mathematics 255 or two years' experience as a mathematics teacher.
An elementary course in the theory of sets. Contains applications to topology.

516. MODERN ALGEBRA FOR TEACHERS. Prereq: Mathematics 510.
The elementary theory of groups, rings, fields and linear algebra.
556. FUNDAMENTALS OF PROBABILITY AND STATISTICS. Prereq: Two
mathematics courses numbered 200 or above or two years' experience teach-
ing high school mathematics.
Fundamental ideas of probability with particular emphasis on their appli-
cations in statistics.
704. BASIC IDEAS FOR CALCULUS. Prereq: Mathematics 255 or approval of
instructor.
A brief survey of the principal ideas and techniques of calculus from a modern
point of view. Intended as a refresher course for high school teachers who
feel the need for an understanding of calculus in order to prepare their stu-
dents for college work. Credit toward the M.Ed. degree only.
- 800, TOPICS IN ANALYSIS
801,
802.
- 804, METHODS OF APPLIED MATHEMATICS
805,
806.
- 810, POINT SET THEORY
811,
812.
- 814, ANALYTIC FUNCTIONS OF A COMPLEX VARIABLE
815,
816.
- 821, ALGEBRAIC TOPOLOGY
822,
823.
- 830, TOPICS IN TOPOLOGY
831,
832.
- 843, MODERN ALGEBRA
844,
845.
- 850, TOPOLOGICAL ALGEBRAIC STRUCTURES
851,
852.
891. SEMINAR IN TOPOLOGY
892. SEMINAR IN ALGEBRA
893. SEMINAR IN ANALYSIS
930. THESIS IN MATHEMATICS

Microbiology (MIC)

(Biological Sciences Building)

Head: Payne. Staff: Bennett, Carson, Eagon, Foster, Giddens, Hamdy, Inman, Howe, Michaels, Roth, VanEseltine, Williams.

Students majoring in Microbiology with the intention of applying for examination for admission to the National Registry of Microbiologists should consult the department head concerning courses required for eligibility.

350. **INTRODUCTORY MICROBIOLOGY.** Three lectures and two double laboratory periods. Prereq: 10 hours of biological science, 5 hours of physical science, Chemistry 261 or 340, or concurrently.

A survey of microorganisms with special emphasis on bacteria and their relationship to man.

352. **MICROBIOLOGY AND DISEASE.** 3 hours. Three lectures or recitations. Prereq: Microbiology 350.

Distribution and nature of specific pathogens; mechanism of transmission, pathogenesis and defense; means of control or prevention.

360. **INTRODUCTION TO EXPERIMENTAL MICROBIOLOGY.** Daily tutorial, library or laboratory work. Prereq: Ten hours of microbiology.

An introduction to the microbiological research literature, laboratory methods and reporting techniques.

389. **DAIRY MICROBIOLOGY.** (Dairy). Three lectures or recitations and two double laboratory periods. Prereq: Microbiology 305.

Determination of numbers and types of bacteria; use of microorganisms in the manufacture of dairy products; study of milk fermentation and disease-producing organisms sometimes occurring in milk.

395. **MICROBIOLOGY OF FOODS** (Food Science). Two lectures or recitations and three double laboratory periods. Prereq: Microbiology 350.

Deals with microorganisms in natural and processed foods; their origin, nature, and effects on foods; enumeration; relations to health.

H-399. **CONTRIBUTIONS OF MICROBIOLOGY TO SCIENTIFIC THOUGHT.**

Offered to provide honors students the opportunity to learn of the contributions to the intellectual, scientific, medical and industrial fields made by microbiology.

409. **FUNDAMENTALS OF MICROBIOLOGY.** Three lectures or recitations and two double laboratory periods. Prereq: Microbiology 350.

Fundamental principles and techniques of general microbiology. Attention will be given to growth, nutrition, inheritance and ecology of representative types of microorganisms.

410. **IMMUNITY** (Microbiology and Preventive Medicine). Three lectures and two double laboratory periods. Prereq: Microbiology 409 or 416.

Mechanisms of infection and host resistance; principles and techniques of serology.

411. **MICROBIOLOGY OF MARKET MILK AND ICE CREAM** (Dairy). Prereq: Dairy Microbiology 389.

Microorganisms found in market milk, ice cream and related products and their relationship to spoilage of the products and to epidemiology.

412. **MICROBIOLOGY OF BUTTER, CHEESE AND CULTURED MILKS (Dairy).** Prereq: Dairy Microbiology 389, Chemistry 261 or 340.
Metabolic changes resulting from the growth of microorganisms occurring in milk and cream intended for manufacturing dairy products and in butter, cheese, and cultured milks; bacteriophage affecting microorganisms.
414. **ADVANCED LABORATORY METHODS IN MICROBIOLOGY.** Prereq: Microbiology 350. Double meeting periods daily.
Instruction in the design and execution of experiments will be provided to acquaint the student with experiments necessary in the basic studies on the bacterial cell — its structures and functions.
421. **ENVIRONMENTAL MICROBIOLOGY (Food Science).** Prereq: Microbiology 3560. One lecture and two 4-hour laboratories.
Microbiological, physical, and mathematical considerations involved in determining thermal death times, rates of heat penetration, and in calculating the lethality of processes will be studied with particular reference to spore-forming anerobes.
422. **PATHOGENIC MICROBIOLOGY (Microbiology and Preventive Medicine).** Three lectures and two double laboratory periods. Prereq: Bacteriology 409 or 416.
Studies on the morphological, cultural and physiological properties of the important pathogenic bacterial and mycotic agents; their relation to health and disease.
440. **ELECTRON MICROSCOPY.** Five recitations or laboratory periods. Prereq: Bacteriology 409 or consent of instructor.
Methods of preparation and examination of biological materials by electron microscopy. A survey of the literature and theory of the instrument. Student preparations and interpretations of results.
450. **VIROLOGY (Microbiology and Preventive Medicine).** Three lectures and two double laboratory periods. Prereq: Microbiology 409.
An introduction to the viruses and rickettsiae: principles and methodology.
461. **MICROBIOLOGY OF SOILS (Agronomy).** Three lectures or recitations and two double laboratory periods. Prereq: Microbiology 350; Agronomy 458, or consent of the instructor.
A survey of the microorganisms occurring in the soil; their activities and effects on soils and crops; factors affecting them; enumeration.
470. **MEDICAL MYCOLOGY.** Two lectures or recitations and three double laboratory periods. Prereq: Bacteriology 350.
A survey of the yeasts, molds and actinomycetes most likely to be encountered by the bacteriologist with special emphasis on the forms that are pathogenic for man and other animals.
480. **MICROBIAL GENETICS.** Three lectures and two laboratory periods. Prereq: Microbiology 350; an introductory genetics course.
A study of the genetics of microorganisms.
800. **INDUSTRIAL FERMENTATIONS (Food Science)**

- 810. IMMUNOCHEMISTRY
- 816. SEMINAR IN MICROBIOLOGY
- 820. ADVANCED PATHOGENIC MICROBIOLOGY
- 860. PHILOSOPHY OF BACTERIA.
- 861. ADVANCED MICROBIAL METABOLISM
- 881. ADVANCED MICROBIAL GENETICS
- 900. PROBLEMS IN MICROBIOLOGY

Music (MUS)

Head: Gerschefski. Staff: Arant, Berman, Carson, Corina, Dancz, Dooley, Douglas, Ennulat, Harriman, John, Karlas, Leonard, Mitchell, Parker, Reilly, Reinke, Reti-Forbes, Richter, Strahl, Wahn.

Theoretical Courses

- 110. FUNDAMENTALS OF MUSIC. 3 hours. (Meets five times a week).
A student expecting to enroll in this course must take an entrance examination.
- 134. HARMONY, SIGHT-SINGING AND DICTATION. Prereq: Music 110.
Part-writing of triads, sight-singing, dictation, and keyboard harmony. Some creative work.
- 135. HARMONY, SIGHT-SINGING AND DICTATION. Prereq: Music 134.
Triads in inversions, dominant seventh chords, sight-singing, dictation, and keyboard harmony. Creative work.
- 136. HARMONY, SIGHT-SINGING AND DICTATION. Prereq: Music 135.
Secondary seventh chords and inversions, sight-singing, dictation, and keyboard harmony. Creative work.
- 310. INTRODUCTION TO COUNTERPOINT. 3 hours. Prereq: Music 136.
Species counterpoint. Introduction to contrapuntal techniques. Some practice writing.
- 324. INSTRUMENTATION. 2 hours. Prereq: Music 136.
Transposition, characteristics and range of the instruments of the orchestra and band. Scoring for miscellaneous small ensembles of these instruments.
- 325. ORCHESTRAL ARRANGING. 2 hours. Prereq: Music 324.
Arranging for the symphony orchestra.
- 326. BAND ARRANGING. 2 hours. Prereq: Music 324.
Arranging for concert band.
- 327. VOCAL ARRANGING. 2 hours. Prereq: Music 324.
Arranging for voices and accompanying instruments.
- 470. FORM AND ANALYSIS. Prereq: Music 136.
Harmonic and polyphonic forms analyzed. Special stress given sonata form and Bach's "Well-Tempered Clavier." Students encouraged to write originally in forms thus analyzed.

471. SIXTEENTH-CENTURY COUNTERPOINT. Prereq: Music 136.
The contrapuntal style and techniques of the sixteenth century, acquaintance with species counterpoint.
475. EIGHTEENTH-CENTURY COUNTERPOINT. Prereq: Music 470.
Late Baroque contrapuntal techniques and styles.
476. COMPOSITION. 2 hours. Prereq: Music 470, 471 and consent of instructor.
477. COMPOSITION. 2 hours. Prereq: Music 476.
Continuation of Music 476.
478. COMPOSITION. 2 hours. Prereq: Music 477.
Writing in larger forms.

Music Literature Courses

122. INTRODUCTION TO MUSIC LITERATURE. 2 hours.
An introductory survey of the music in the standard repertory of today.
123. HISTORY OF MUSIC. Prereq: Music 122.
The historical development of music, from the Classical Period to the present.
124. HISTORY OF MUSIC. Prereq: Music 122.
The historical development of music from its origin through the Baroque Period.
- H-259. HISTORY AND ANALYSIS OF MUSICAL STYLE. (Not open to students with credit in Music 300, 343, 358 or Fine Arts 300).
A study of the history and development of music with particular emphasis upon the relationship of music to the important movements in Western Civilization.
300. APPRECIATION OF MUSIC. (May be used instead of Fine Arts 300 to meet Fine Arts requirement. Not open to students with credit in Music H-259, 343, 358, or Fine Arts 300).
A study of masterpieces of music literature, with particular reference to those being performed on campus during the current quarter.
343. LISTENER'S HISTORY OF MUSIC. 3 hours.
A study of many of the masterpieces of music since the time of Bach; an introduction to music literature.
350. DEVELOPMENT OF OPERA. Offered alternate years. Given 1967-'68.
A general literature course in the appreciation of the entire field of opera. Illustrations from selected scores played in class.
358. HISTORY AND ANALYSIS OF MUSICAL STYLE.
Designed especially for art majors.
420. ANCIENT AND MEDIEVAL MUSIC. Offered alternate years. Not given 1967-68; Prereq: Music 123 and 124.
A survey of music from the birth of Christianity to ca. 1400, with an introduction to the place of music in Greek and Roman societies.
421. MUSIC IN THE RENAISSANCE PERIOD. Offered alternate years. Not given 1967-'68. Prereq: Music 123 and 124.

- A music history and literature course covering the Renaissance Period, 1400-1600.
422. **MUSIC IN THE BAROQUE PERIOD.** Offered alternate years. Not given 1967-68. Prereq: Music 123 and 124.
A study of musical styles and forms from Monteverdi through Bach and Handel.
423. **MUSIC IN THE CLASSIC PERIOD.** Offered alternate years. Given 1967-'68. Prereq: Music 123 and 124.
A study of chamber, orchestral, keyboard, and operatic works from the middle and late 18th century.
424. **MUSIC IN THE ROMANTIC PERIOD.** Offered alternate years. Given 1967-'68. Prereq: Music 123 and 124.
An intensive study of the Romantic Period; emphasis on the development of the song, symphony, chamber music, and opera.
430. **KEYBOARD LITERATURE.** 3 hours. Offered alternate years. Not given 1967-'68. Prereq: Music 123 and 124.
A survey of music composed for keyboard instruments from the fourteenth century to the present day.
431. **SONG LITERATURE.** 3 hours. Offered alternate years. Not given 1967-'68. Prereq: Music 123 and 124.
An introduction to the major styles of song composition from the time of the Troubadours to the present.
432. **STRING LITERATURE.** 3 hours. Offered alternate years. Given 1967-'68. Prereq: Music 123 and 124.
The study of string music from the Italian Baroque to present day.
440. **NON-WESTERN MUSIC.** 3 hours. Offered alternate years. Given 1967-'68. Prereq: Music 123 and 124.
An introduction to the music of non-European cultures, including those of the Far East, Near East, and Africa.
441. **BIBLIOGRAPHY.** 3 hours. Prereq: Music 123 and 124.
An introduction to the existing body of material, including music and books on music, which serves as the basis for musical research, and to the procedures and techniques used in research.
455. **ADVANCED MUSIC HISTORY.** Prereq: Music 123 and 124.
Special studies in history and literature of music.
458. **WIND INSTRUMENT LITERATURE.** 3 hours. Offered alternate years. Not given 1967-'68.
A survey of the solo, sonata, and ensemble music composed for wind instruments, from the Baroque Period to the present.
462. **MODERN MUSIC.** Offered alternate years. Given 1967-'68. Prereq: Music 123 and 124.
A literature course illustrating modern trends in music from Schoenberg, Stravinsky, Hindemith, Bartok, and others.
500. **THESIS.** 2 hours. Prereq: Music 441.

MUSIC EDUCATION COURSES

201. INTRODUCTION TO MUSIC EDUCATION. 1 hour.
Introduction to the professional responsibilities of the music educator.
241. STRING CLASS. 1-4 hours (1 per qtr.).
Basic principles of string instrument performance and pedagogy.
242. WOODWIND CLASS. 1-4 hours (1 per qtr.).
Basic principles of wood-wind instrument performance and pedagogy.
243. BRASS CLASS. 1-4 hours (1 per qtr.).
Basic principles of brass instrument performance and pedagogy.
244. PERCUSSION CLASS. 1-2 hours (1 per qtr.).
Basic principles of percussion instrument performance and pedagogy.
245. VOICE CLASS. 1-6 hours (1 per qtr.).
Basic principles of voice production and their application to glee clubs and choruses.
246. PIANO CLASS. 1-9 hours (1 per qtr.).
Study of basic keyboard technique.
302. METHODS OF TEACHING PUBLIC SCHOOL MUSIC. For education majors only.
Techniques of teaching music in the elementary school; for the classroom teacher.
312. MUSIC FOR ELEMENTARY GRADES. For music majors. Prereq: Music 136.
313. MUSIC IN JUNIOR AND SENIOR HIGH SCHOOLS. For music majors.
Prereq: Music 136.
- 346, 347, 348. STUDENT TEACHING (See page 145).
361. ELEMENTARY CONDUCTING. 2 hours. Prereq: Music 124, 136.
Basic principles and techniques of conducting and interpretation.
362. CHORAL CONDUCTING. 2 hours. Prereq: Music 361.
Rehearsal, interpretive, and conducting techniques for choral organizations.
363. BAND CONDUCTING. 2 hours. Prereq: Music 361.
Rehearsal, interpretive and conducting techniques for band organizations.
364. ORCHESTRAL CONDUCTING. 2 hours. Prereq: Music 361.
Rehearsal, interpretive and conducting techniques for orchestral organizations.
365. SURVEY OF CHORAL MUSIC AND TECHNIQUE OF CHORAL CONDUCTING. Prereq: Music 136.
A survey of choral music from the Renaissance Period to the present. Emphasis on stylistic characteristics and conducting techniques essential to authentic performance practice.
514. WORKSHOP FOR TEACHERS IN MUSIC EDUCATION.
Study of techniques and materials for the elementary school music program.
520. CHURCH MUSIC. 5 or 10 hours. Prereq: 3 quarters of organ study.

521. Church service-playing, including open score reading, clef reading, oratorio accompaniment, and improvisation. The study of liturgies, hymnology, and church solo material.
531. PROBLEMS IN VOCAL MUSIC EDUCATION. 3 hours. Prereq: Music 312 and 313.
Detailed study of voice problems from classroom point of view beginning in elementary and continuing through secondary school; technique used in choral ensembles; evaluation of present concepts and practices.
532. PROBLEMS IN INSTRUMENTAL MUSIC EDUCATION. 3 hours. Prereq: Music 312 and 313.
Study of techniques used for development of the instrumental music program beginning in elementary and continuing through secondary school; diagnosis of problems relating to strings, woodwinds, brasses, percussion.
533. MUSIC ADMINISTRATION AND CURRICULUM. 3 hours. Prereq: Undergraduate requirements in education, Music 312 and 313.
Development of music curriculum as part of general education planning; evaluation of school curricula and how music can become a functional part; problems in music administration.
534. CHORAL MUSIC MATERIALS. 3 hours. Prereq: Music 312 and 313.
Study and evaluation of music literature available for use in public school at all levels of instruction; research in various mediums and schools of composition which can be adapted for school use.
535. INSTRUMENTAL MUSIC MATERIALS. 3 hours. Prereq: Music 312 and 313.
Evaluation of materials available at all levels of instruction for band, orchestra and chamber music; research in materials of various mediums and schools of composition which can be adapted for school use.

Applied Music

(Primarily for Music Majors)

The following courses are offered primarily for music majors, but a limited number of non-majors may be accepted when schedules permit. A laboratory fee of \$30 per quarter is charged to non-majors for each 25-minute lesson taken weekly.

All music students are required to participate in weekly seminars in their major performance media, and to attend student recitals and music appreciation programs as scheduled.

Before registering for applied music course, students must consult with the Head of the Music Department.

181. APPLIED MUSIC. 1 hour (3 hours per year).
One 25-minute private lesson a week for three quarters. Laboratory fee course.
182. APPLIED MUSIC. 2 hours (6 hours per year).
Two 25-minute private lessons a week for three quarters. Laboratory fee course.
183. APPLIED MUSIC. 3 hours (9 hours per year).
Two 25-minute private lessons a week for three quarters. Laboratory fee course.

184. **APPLIED MUSIC.** 4 hours (12 hours per year).
Two 25-minute private lessons a week for three quarters. Laboratory fee course.
281. **APPLIED MUSIC.** 1 hour (3 hours per year). Prereq: Music 181.
One 25-minute private lesson a week for three quarters. Laboratory fee course.
282. **APPLIED MUSIC.** 2 hours (6 hours per year). Prereq: Music 182.
Two 25-minute private lessons a week for three quarters. Laboratory fee course.
283. **APPLIED MUSIC.** 3 hours (9 hours per year). Prereq: Music 183.
Two 25-minute private lessons a week for three quarters. Laboratory fee course.
284. **APPLIED MUSIC.** 4 hours (12 hours per year). Prereq: Music 184.
Two 25-minute private lessons a week for three quarters with junior recital for voice and composition majors in third quarter. Laboratory fee course.
381. **APPLIED MUSIC.** 1 hour (3 hours per year). Prereq: Music 281.
One 25-minute private lesson a week for three quarters. Laboratory fee course.
382. **APPLIED MUSIC.** 2 hours (6 hours per year). Prereq: Music 282.
Two 25-minute private lessons a week for three quarters. Laboratory fee course.
383. **APPLIED MUSIC.** 3 hours (9 hours per year). Prereq: Music 283.
Two 25-minute private lessons a week for three quarters. Laboratory fee course.
384. **APPLIED MUSIC.** 4 hours (12 hours per year). Prereq: Music 284.
Two 25-minute private lessons a week for three quarters with junior recital for performance majors and senior recital for voice and composition majors in third quarter. Laboratory fee course.
481. **APPLIED MUSIC.** 1 hour (3 hours per year). Prereq: Music 381.
One 25-minute private lesson a week for three quarters. Laboratory fee course.
482. **APPLIED MUSIC.** 2 hours (4 or 6 hours per year). Prereq: Music 382.
Two 25-minute private lessons a week for three quarters for A.B. students.
Two 25-minute private lessons a week for two quarters for B.M. Music Education students with senior recital in the second quarter. Laboratory fee course.
483. **APPLIED MUSIC.** 3 hours (9 hours per year). Prereq: Music 383.
Two 25-minute private lessons a week for three quarters with senior recital for B.F.A. students in third quarter. Laboratory fee course.
484. **APPLIED MUSIC.** 4 hours (12 hours per year). Prereq: Music 384.
Two 25-minute private lessons a week for three quarters with senior recital in third quarter. Laboratory fee course.

Performing Organization and Ensemble Courses

A maximum of six hours in performing organizations is allowed toward graduation.

291. **CHAMBER MUSIC ENSEMBLE.** 1-6 hours. (1 per quarter).
One hour per week. Open to freshman and sophomore students who can qualify in keyboard, string, or wind instruments.
387. **UNIVERSITY CIVIC SYMPHONY ORCHESTRA.** 1-6 hours. (1 per quarter).
Three hours per week for two years. Open to students who can qualify.
388. **UNIVERSITY CHORUS.** 1-6 hours. (1 per quarter).
Three hours per week for two years. Open to students who can qualify.

389. **GEORGIA SINGERS.** 1-6 hours. (1 per quarter).
Four hours per week for two years. Open to students who can qualify.
390. **UNIVERSITY BAND.** 1-6 hours. (1 per quarter).
Four hours per week for two years. Open to students who can qualify.
491. **CHAMBER MUSIC ENSEMBLE.** 1-6 hours. (1 per quarter).
One hour per week. Open to junior and senior students who can qualify in keyboard, string, or wind instruments.
591. **COLLEGIUM MUSICUM.** 1-3 hours. (1 per quarter).
A study of the inter-relationship of music history, theory, and performance.

Music Courses Combined with other Courses

451. **MUSIC AND LITERATURE.**
A comparative study of the forms, relationships, and aesthetics of music and literature. Admission by consent of instructor.
710. **ADVANCED THEORY.** 3 hours. Prereq: Music 136.
A survey of harmonic and contrapuntal resources with emphasis upon aural and visual analysis.
714. **WORKSHOP FOR TEACHERS IN MUSIC EDUCATION.**
Study of techniques and materials for the elementary school music program.
720. **CHURCH MUSIC.** 5 or 10 hours. Prereq: 3 quarters of organ study.
721. Church service-playing including open score reading, clef reading, oratorio accompaniment, and improvisation. The study of liturgies, hymnology, and church solo material.
731. **PROBLEMS IN VOCAL MUSIC EDUCATION.** 3 hours. Prereq: Music 312 and 313.
Detailed study of voice problems from classroom point of view beginning in elementary and continuing through secondary school; techniques used in choral ensembles; evaluation of present concepts and practices.
732. **PROBLEMS IN INSTRUMENTAL MUSIC EDUCATION.** 3 hours. Prereq: Music 312 and 313.
Study of techniques used for development of the instrumental music program beginning in elementary and continuing through secondary school; diagnosis of problems relating to strings, woodwinds, brasses, percussion.
733. **MUSIC ADMINISTRATION AND CURRICULUM.** 3 hours. Prereq: undergraduate requirements in education, Music 312 and 313.
Development of music curriculum as part of general education planning; evaluation of school curricula and how music can become a functional part; problems in music administration.
734. **CHORAL MUSIC MATERIALS.** 3 hours. Prereq: Music 312 and 313.
Study and evaluation of music literature available for use in public schools at all levels of instruction; research in various mediums and schools of composition which can be adapted for school use.
735. **INSTRUMENTAL MUSIC MATERIALS.** 3 hours. Prereq: Music 312 and 313.
Evaluation of materials available at all levels of instruction for band, orchestra

and chamber music; research in materials of various mediums and schools of composition which can be adapted to school use.

736. **EDITING AND ARRANGING.** 3 hours. Prereq: Music 325, 326, or 327.
Evaluation of representative instrumental and vocal published scores. A study of how to adapt them to specific groups; transcription for large or small ensembles; studies in timbre, color, qualities, etc., of instruments and voices; arranging accompaniments.
737. **SCORE ANALYSIS.** 3 hours. Prereq: Music 136, 470.
Techniques of harmonic and formal analysis and preparation of scores for rehearsal.
738. **ADVANCED CONDUCTING.** 3 hours. Prereq: Music 362, 363, or 364.
An intensive study of choral and instrumental conducting techniques and their application in laboratory sessions.
751. **INSTRUMENTAL TECHNIQUES.** 2-6 hours. (2 per quarter).
An advanced study of the performance and teaching techniques of wind, string, and percussion instruments.
781. **APPLIED MUSIC.** 1-6 hours. (1 per quarter).
One 25-minute private lesson a week. Applied music in secondary performance media for graduate students in music education. Laboratory fee course.
782. **APPLIED MUSIC.** 2-6 hours. (2 per quarter).
Two 25-minute private lessons a week and one-hour seminar as arranged. Applied music for music education graduate students in their field of concentration. Laboratory fee course.
785. **APPLIED MUSIC.** 5-15 hours. (5 per quarter).
Two 25-minute private lessons a week and one-hour seminar as arranged. Primarily for the major performance medium of music students in the MFA program. Others by permission of the Head of the Music Department. Laboratory fee course.
791. **COLLEGIUM MUSICUM.** 1-3 hours. (1 per quarter).
A study of the inter-relationship of music history, theory, and performance.
792. **CHAMBER MUSIC ENSEMBLE.** 2 hours. One hour per week.
Preparation of representative works with faculty members and qualified students.
793. **CHAMBER MUSIC ENSEMBLE.** 3 hours. Prereq (or co-requisite): Music 792. One hour per week.
Preparation of representative works with faculty members and qualified students, to include public recital.
821. **MUSIC EDUCATION SEMINAR**
860. **SEMINAR IN MUSIC THEORY**
867. **SPECIAL STUDIES OF COMPOSERS**
868. **CHAMBER MUSIC LITERATURE**
869. **PERFORMANCE PRACTICE**
870. **HISTORY OF NOTATION**
871. **AMERICAN MUSIC**

- 872. HISTORY AND DEVELOPMENT OF MUSICAL INSTRUMENTS
- 873. THE CONCERTO
- 874. PHYSIOLOGY OF MUSIC
- 875. RESEARCH SEMINAR
- 876. ACOUSTICS OF MUSIC
- 878. SEMINAR IN SACRED MUSIC LITERATURE
- 879. ADVANCED COMPOSITION
- 880. THE SYMPHONY
- 921. MUSIC PROBLEMS
- 930. THESIS

Philosophy (PHY) and Religion (REL)

(Peabody Hall)

Head: Blackstone. Staff: Ayers, Broiles, Clarke, Harrison, Heslep, Nemetz, and O'Briant.

Philosophy

104. INTRODUCTION TO PHILOSOPHY.

The fundamentals of philosophy, the meaning and function of philosophy, the vocabulary and problems of philosophy, and the relation of philosophy to science, art and religion. Includes a survey of the basic issues and major types in philosophy, and shows their sources in experience, history, and representative thinkers.

H-115 (215). THE FUNDAMENTAL QUESTIONS OF PHILOSOPHY (HONORS).

A study of the fundamental questions of philosophy and the answers given to those questions by the major schools of philosophical thought. Not open to any student having credit for Philosophy 104.

258. MODERN LOGIC.

A study of the principles and problems of critical thinking, especially of deductive reasoning, both sentential and class. Consideration is given to the more frequently used logical formulae; the uses of language, logical, emotional and volitional; the making of definitions; and the logical fallacies.

305. ETHICS.

A study of moral philosophy in its bearing on human conduct and social relations, including an analysis of the nature and criteria of good and evil, right and justice, moral obligation and freedom. Issues of personal and social ethics are discussed in the light of readings in the classical moralists and in contemporary literature.

H-315. ETHICS (HONORS).

A survey and analysis of classical and contemporary ethical theory. Not open to any student having credit for Philosophy 305. Ethics.

H-368. INTRODUCTION TO SYMBOLIC LOGIC (HONORS).

A study of the principles of critical thinking, especially of deductive systems, including sentential logic, quantification and the alogic of relations. Some

attention will be given alternate formulations of these systems. Not open to any student having credit for Philosophy 258, Modern Logic.

404. **CLASSICAL AMERICAN PHILOSOPHERS.** Prereq: At least one course in Philosophy other than 258.
A study of the major writings of C. S. Pierce, William James, and John Dewey and their influence on the development of contemporary philosophy.
405. **CONTEMPORARY ETHICAL THEORIES.** Prereq: Philosophy 305, two other courses in philosophy, or consent of instructor.
A study of the nature and justification of fundamental ethical concepts and moral principles with special emphasis on the ethical theories of contemporary Anglo-Saxon moral philosophers.
408. **(RELIGION) PHILOSOPHY OF RELIGION.**
The branch of philosophy that inquires into the origin, nature, function, and value of religion; examines the source and validity of the claims which religion makes; studies the fundamental religious problems and concepts as they find expression in Western religious philosophies, such as Judaism, Catholicism, Protestantism, Modernism, Agnosticism, Ethical Idealism, and Humanism.
411. **(ART) AESTHETICS.**
The philosophy of the beautiful and of aesthetic values in art, literature, music, or wherever found. An analysis of aesthetic experience and of aesthetic types. Covers the nature, origin, psychological and social foundations of art, both practical and fine. Particular emphasis is placed upon the role of social ideas and cultural circumstances in the growth and decline of the various arts.
416. **(LAW) PHILOSOPHY OF LAW.** Prereq: Ten hours of philosophy, political science or law. Offered in alternate years. Offered in 1966-'67.
A study of the nature and function of law with emphasis on the interpretation and application of the law in the judicial process. Readings in classical and contemporary schools of the philosophy of law.
420. **HISTORY OF PHILOSOPHY, ANCIENT.** Prereq: Philosophy 104 or consent of instructor.
A course in the primary works of the great ancient philosophers, especially the writings of Plato and Aristotle.
421. **HISTORY OF PHILOSOPHY, MEDIEVAL.** Prereq: Philosophy 104 or consent of instructor.
Selected readings in the works of the great medieval philosophers, especially St. Thomas Aquinas and St. Augustine.
422. **HISTORY OF PHILOSOPHY, MODERN.** Prereq: Philosophy 104 or consent of instructor.
Traces the development of European philosophy up to the nineteenth century.
444. **SYMBOLIC LOGIC. (Mathematics 444).** Prereq: Philosophy 258 or consent of instructor.
An advanced course dealing with both traditional and modern methods in logic, especially the contributions of symbolic and mathematical logic.
450. **CONTEMPORARY PHILOSOPHY.** Prereq: At least one course in philosophy other than 258.
The third course in the History of Philosophy sequences but may be taken

independently. Selected readings in important philosophers of the 19th and 20th centuries, including such thinkers as Nietzsche, Mill, Marx, Spencer, Bergson, James, Royce, Dewey, Whitehead, and Santayana. The problem is left flexible to allow for the divergent interests and needs of students and to permit consideration of significant current material.

459. PHILOSOPHY OF SCIENCE.

A study of the methods, principles, and problems of inductive reasoning, including the nature of probable inference, techniques of verification, and the structure of scientific explanation.

460. METAPHYSICS AND EPISTEMOLOGY. Prereq: At least one course in philosophy.

The problem of metaphysics and the relationship of metaphysical concepts to the theory of knowledge.

471. (SOCIOLOGY) PHILOSOPHY OF SOCIAL SCIENCE. Prereq: Permission of instructor.

A study of the methods and problems of inductive reasoning, including the nature of probable inference, techniques of verification, and the structure of scientific explanations, with special reference to the social sciences.

For descriptions of the following courses in political philosophy, refer to the offerings in political science.

485. (POLITICAL SCIENCE) POLITICAL PHILOSOPHIES OF ANCIENT, MEDIEVAL, AND EARLY MODERN TIMES.

486. (POLITICAL SCIENCE) POLITICAL PHILOSOPHIES OF RECENT TIMES.

800, PHILOSOPHICAL SYSTEMS OF PLATO, ARISTOTLE, AND THE
801, MIDDLE AGES

802.

803. (EDUCATION) PHILOSOPHY OF EDUCATION

810, PHILOSOPHICAL SYSTEMS OF CONTINENTAL RATIONALISM,
811, BRITISH EMPIRICISM, AND KANT

812.

814. RECENT SCHOOLS OF EMPIRICISM

820. SEMINAR IN THE HISTORY OF PHILOSOPHY

830. SEMINAR IN POLITICAL PHILOSOPHY

840. SEMINAR IN ETHICS

849. SEMINAR IN PROBLEMS OF LOGIC

860. SEMINAR IN METAPHYSICS AND EPISTEMOLOGY

870. PROBLEMS AND TOPICS IN RECENT AND CONTEMPORARY PHILOSOPHY

880. READINGS AND RESEARCH IN SPECIAL PROBLEMS IN PHILOSOPHY.

930. THESIS

Religion (REL)

For the convenience of the students, courses approved for transfer credit when taken at the Christian College of Georgia are listed below, as numbers 320-361. A maximum of 15 hours may be transferred. Each course carries 5 hours of credit. Classes are held at the Christian College, 220 South Hull Street.

320. RELIGION IN AMERICA.

The rise and development of organized religion in the United States from the Colonial period to the present; principally a study of American Catholicism, Judaism and Protestantism and their significance as a major factor in the development of American life.

330. THE RELIGIOUS THOUGHT OF THE BIBLE.

The leading religious ideas of both the Old and New Testaments; their rise and development; and their importance to Hebrew-Christian religion.

321. THE JOHANNINE BOOKS OF THE NEW TESTAMENT.

The Gospel, Letters, and Revelation of John, including the critical problems dealing with these books, with major emphasis on their content and religious value for Christians of the first century and today.

332. THE LIFE AND LETTERS OF PAUL.

An historical-exegetical study of the life and letters of Paul; the relationship between Acts and the Pauline Epistles, early non-Pauline Gentile Christianity, the Pauline theology and its lasting impression on Christianity.

341. THE ORIGIN AND DEVELOPMENT OF CHRISTIANITY TO 1500 A.D.

Historical and social background of the rise of Christianity; and a study of the interrelation between Christianity and Western Civilization during the periods of early and medieval Christianity.

350. RELIGION DURING THE REFORMATION AND MODERN PERIODS.

A socio-historical presentation of the development of Christianity in the reformation and modern periods in Europe; Christianity's relation to the growth of Western Civilization.

361. CHRISTIANITY AND COMMUNISM.

An examination of the tenets and practices of communism in the light of Christian thought. Attention is focused on the confrontation between communism and the churches behind the iron and bamboo curtains.

400. HISTORY OF RELIGION.

It is the aim of this course to survey the nature of early primitive religions and to cover the main outlines of the chief living religions of the world. The method will be both historical and analytical.

410. OLD TESTAMENT LITERATURE. (Offered in 1967-'68).

A study of the nature, content, and problems of Old Testament literature, with attention given to historical data, literary forms, and outstanding personalities.

411. NEW TESTAMENT LITERATURE. (Offered in 1967-'68).

A study of the nature, content, and problems of New Testament literature, with particular attention given to (1) the political, social, and religious background of Judaism, out of which Christianity sprang; (2) the life of Jesus; (3) the immediate foreground of an expanding church.

430. **PERSONALITIES OF THE OLD TESTAMENT.** (Offered in 1966-'67).
A study of the development of Hebrew religion from its early, more primitive stages to the high point attained in the social, ethical, and spiritual teaching of the great writing prophets of Israel.
440. **THE TEACHINGS OF JESUS.** (Offered in 1966-'67).
Although primarily a study of what Jesus taught, attention is given to the literary and environmental background of his teaching, the historical life of the teacher, and the contemporary validity of what he taught.

Physics and Astronomy (PCS)

(Physics Building)

Head: Burkhard. Staff: Abbe, Cooper, Dangle, Duncan, Efinger, Henkel, Henry, Kunkel, Nance, Reuning, Rives, Scott, Sears, Shand, Steuer, Wood.

Astronomy

291. **DESCRIPTIVE ASTRONOMY.** Prereq: Physical Science 101. Four lectures and one two-hour laboratory period per week.
A survey of the planetary system followed by a more extensive discussion of stars, nebula, galactic and stellar structure and evolution, exterior galaxies and cosmology based on modern astrophysical theories and techniques.
392. **INTRODUCTION TO ASTROPHYSICS.** 5 hours of recitation. Prereq: Astronomy 291 and Physics 239.
Continuous and line spectra of sun, stars, and interstellar matter; stellar absorption and emission coefficients; line formation and curve of growth; spectral classification; mass-luminosity law; radiative transfer equation; stellar models, evolution, and energy sources.
591. **ASTRONOMY FOR TEACHERS.** Not open to students with credit in Astronomy 291. Four hours of recitations and two hours of laboratory per week. Prereq: 10 hours of physics and 20 hours of physical science (physics, chemistry, geology, mathematics, and astronomy).
Discussions, lectures, and laboratory exercises focused on the problems that are involved in science teaching in the secondary schools relative to astronomical concepts and procedures.

Physical Science (PSC)

101. **PHYSICAL SCIENCE.** No credit will be allowed for Physical Science 101 if a student shows prior credit for any course in physics.
A survey, the objectives of which are: (1) to give an elementary knowledge of the most fundamental facts, laws, theories, and hypotheses of physics and astronomy and the main practical application of these sciences in our daily lives; (2) to give some idea of the meaning and value of the scientific method and how physical science has modified man's way of thinking and manner of living.

Physics (PCS)

All physics majors should take Pcs 137, 138, and 239 instead of Pcs 127, 128, and 229.

127. GENERAL PHYSICS—MECHANICS. Four hours of recitation and two hours of laboratory work. Prereq: Mathematics 100-101.
An introduction course that deals with the fundamental laws of mechanics.
128. GENERAL PHYSICS—HEAT, SOUND, AND LIGHT. Four hours of recitation and two hours of laboratory work. Prereq: Physics 127.
An introductory course dealing with the fundamental laws of heat, sound, and light.
137. INTRODUCTORY PHYSICS FOR SCIENCE STUDENTS—MECHANICS. No credit will be allowed for Physics 137 if credit is shown for Physics 127. Four hours of recitation and two hours of laboratory work. Prereq: Mathematics 253, Co-requisite: Mathematics 254.
Fundamental laws of mechanics. The calculus is used as a mathematical tool in order to lead to a better understanding of the physical principles studied.
138. INTRODUCTORY PHYSICS FOR SCIENCE STUDENTS—HEAT, SOUND, AND LIGHT. No credit will be allowed for Physics 138 if credit is shown for Physics 128. Four hours of recitation and two hours of laboratory work. Prereq: Physics 137.
Fundamental laws of heat, sound, and light. The calculus is used as a mathematical tool in order to lead to a better understanding of the physical principles studied.
229. GENERAL PHYSICS—ELECTRICITY, MAGNETISM AND MODERN PHYSICS. Four hours of recitation and two hours of laboratory work. Prereq: Physics 128.
Fundamental laws of electricity and magnetism. Some of the newest developments in the general field of physics are also discussed.
239. INTRODUCTORY PHYSICS FOR SCIENCE STUDENTS—ELECTRICITY, MAGNETISM, AND MODERN PHYSICS. No credit will be allowed for Physics 239 if credit is shown for Physics 229. Four hours of recitation and two hours of laboratory work. Prereq: Physics 138.
Fundamental laws of electricity and magnetism. Some of the newest developments in the general field of physics are also discussed. The calculus is used as a mathematical tool in order to lead to a better understanding of the physical principles studied.
332. EXPERIMENTAL ELECTRICITY AND MAGNETISM. Three hours of recitation and six hours of laboratory work. Prereq: Physics 229, or 239, Mathematics 254 and Mathematics 255.
An intermediate course in electrical and magnetic measurements.
333. LIGHT. Four hours of recitation and three hours of laboratory work. Prereq: Physics 229, and Mathematics 255.
An intermediate course stressing experimental work in reflection, refraction, interference, diffraction, and polarization of light.
334. HEAT AND THERMODYNAMICS. Four hours of recitation and two hours

of laboratory work. Prereq: Physics 229, Mathematics 254 and Mathematics 255.

The material in this course includes temperature and its measurement, specific heats, thermal expansion, transfer of heat by conduction, convection and radiation, the states of matter, elementary thermodynamics, production of high and low temperatures.

372. MODERN PHYSICS. Five hours of recitation. Prereq: Physics 229, Mathematics 254. Co-req: Mathematics 255.

An intermediate course dealing with some of the recent developments in physics.

380. ELECTRONICS. Three hours of recitation and four hours of laboratory work. Prereq: Physics 332.

An introduction to the theory and applications of basic electronic devices.

400. PHYSICS SEMINAR. One hour credit per quarter. Two hours per week. Required of all senior students majoring in physics.

Discussion of various topics in the field of physics.

- 404, 405. THEORETICAL MECHANICS. Four hours each. Four hours of recitation per week. Prereq. for 404: Physics 229, Co-req. for 404: Mathematics 401.

These courses develop within the framework of Newtonian principles; Statics, kinematics and dynamics of a particle and of systems of particles, mechanics of continuous media, and Lagrange's equations.

- 420, 421. ELECTRICITY AND MAGNETISM. Four hours each. Four hours of recitation per week. Prereq. for 420: Physics 332 and Mathematics 401.

Beginning with the experimentally determined laws of Coulomb, Ampere, Biot-Savart, Faraday, and others the fundamental methods of Gauss and Stokes will be applied to develop logically the complete theory as embodied in Maxwell's equations.

430. THERMODYNAMICS. Five hours of recitation per week. Prereq: Physics 229 or 239. Co-req: Mathematics 458.

The laws of thermodynamics and their application to the fundamental concepts of physics.

431. KINETIC THEORY AND STATISTICAL MECHANICS. Five hours of recitation per week. Prereq: Physics 404 and Physics 430.

An introduction to the study of statistical mechanics and its application to the study of gases.

440. METHODS OF THEORETICAL PHYSICS. Five hours of recitation per week. Prereq: Physics 404 and Mathematics 256.

The application of advanced mathematics to the solution of the ordinary and partial differential equations encountered in courses in advanced physics.

450. ATOMIC PHYSICS. Four hours of recitation and two hours of laboratory per week. Prereq: Physics 333 and Physics 404.

This course develops atomic theory as may be determined from optical and X-ray spectra and the interaction of atoms with electric and magnetic fields. Atomic spectra will be interpreted with the aid of Schrodinger's wave equation.

- 465, EXPERIMENTAL PHYSICS. 3 hours each. Eight hours of laboratory per
 466, week. Prereq: Physics 332 and 372.
467. Laboratory courses in which the student uses modern experimental techniques
 to investigate phenomena in atomic, molecular, nuclear, and solid state
 physics.
- 472, NUCLEAR STRUCTURE. 4 hours each. Four hours of recitation per week.
 473. Prereq. for 472: Physics 450.
 Introduction to the theory of nuclear structure as it has been inferred from
 quantum mechanical considerations and the study of experimental data on
 radioactivity and nuclear reactions.
- 482, SOLID STATE PHYSICS. 4 hours each. Four hours of recitation per week.
 483. Prereq. for 482: Physics 404; Physics 430 desirable.
 Elastic, electrical, magnetic, and thermal properties of solids. Covers such topics
 as: crystal structure, X-ray, and neutron diffraction, elasticity, crystal imper-
 fections, thermal and electrical conduction, spin resonance, the photoelectric
 effect, and transistivity theory.
528. HEAT, SOUND, AND LIGHT. Four lecture and discussion and one two-
 hour laboratory period per week. Prereq: 15 hours of physics. *Credit is limited
 to students working for a degree in education.*
 This course is designed to aid the elementary physics teacher in dealing with
 problems in heat, sound, and light which may arise in his teaching. The
 factors involved in the effective presentation of physical concepts in these
 areas will be emphasized.
529. ELECTRICITY, MAGNETISM, ELECTRONICS AND RADIOAC-
 TIVITY. Four lecture and discussion and one two-hour laboratory period
 per week. Prereq: 15 hours of physics. *Credit is limited to students working
 for a degree in education.*
 This course is designed to aid the elementary physics teacher in dealing with
 problems in electricity, magnetism, electronics, and radioactivity which arise
 in his teaching. The factors involved in the effective presentation of physical
 concepts in these areas will be emphasized.
- 801, ADVANCED ANALYTICAL MECHANICS
 802,
 803.
- 810, QUANTUM MECHANICS
 811,
 812.
- 820, ADVANCED ELECTROMAGNETIC THEORY
 821,
 822.
- 830, STATISTICAL MECHANICS
 831,
 832.
- 850, MOLECULAR SPECTRA AND STRUCTURE OF DIATOMIC AND
 851, POLYATOMIC MOLECULES
 852.

- 855, INFRARED SPECTROSCOPY
856.
- 873, NUCLEAR THEORY
874,
875.
- 882, ADVANCED SOLID STATE PHYSICS
883,
884.
- 890, ADVANCED TOPICS
891,
892.

Political Science (POL)

(*LeConte Hall*)

Acting Head: Dye. Staff: Askew, Chittick, Clute, Collins, Cornog, Gibson, Golembiewski, Gugin, Hawkins, Hughes, Moran, Parthemos, Range, Saye, Sharkansky, Welsh, Wright.

AMERICAN GOVERNMENT AND AMERICAN CONSTITUTIONAL LAW

101. AMERICAN GOVERNMENT.

An introductory course covering the essential facts of federal, state, and local governments in the United States. Prerequisite for advanced courses in political science. A satisfactory grade will exempt a student from the requirement of passing an examination on the Constitution of the United States and the Constitution of Georgia before graduation.

H-105. AMERICAN GOVERNMENT (HONORS). Not open to students with credit in Political Science 101.

An introduction to political science with emphasis on American political institutions, supplemented by reading designed to introduce the students to the source materials of American political theory and the development of American political institutions.

202. AMERICAN GOVERNMENT. Prereq: Political Science 101. All students who expect to major in political science are advised to take this course.

A continuation of Political Science 101 with emphasis on governmental policies, functions, and programs and on the internal organization and actual workings of the various administrative departments and agencies of our national government.

410. AMERICAN POLITICAL PARTIES.

A study of the influence of political parties on the governmental organization and on the history and political thought of the United States.

411. THE ELECTORAL PROCESS.

An examination of the factors which contribute to an electoral choice. Both psychological and sociological influences are considered.

413. GOVERNMENT AND INTEREST GROUPS.

A study of the major organized agrarian, labor, business, professional and other special interest groups that regularly participate in the formation of public policy in the United States.

414. THE LEGISLATIVE PROCESS.

A study of local, state, and national legislative bodies with emphasis on recruitment and composition, leadership, procedures, the role of parties and interest groups, and theories of representation.

483. AMERICAN CONSTITUTIONAL LAW.

A study of the fundamental principles of constitutional interpretation and practice in the United States through decisions and opinions of the Supreme Court.

484. AMERICAN CONSTITUTIONAL LAW.

A continuation of Political Science 483, with emphasis on recent Supreme Court decisions.

883, PROBLEMS OF CONSTITUTIONAL GOVERNMENT IN THE
884. UNITED STATES.

STATE AND LOCAL GOVERNMENTS

405. THE CONSTITUTION OF GEORGIA.

An historical survey of the evolution of the Constitution of Georgia followed by a detailed study of the present Constitution through decisions and opinions of the Supreme Court of Georgia.

406. STATE GOVERNMENT.

A study of the forms of organization, the functions, and the operations of state government of the United States with particular emphasis on the government of the State of Georgia. Exempts the student from the requirement of passing an examination on the Constitution of the United States and the Constitution of Georgia before graduation.

468. CITY AND COUNTY GOVERNMENT.

Organization and operation of city and county governments in the United States. Political aspects of these governments and techniques of citizen participation.

868. SEMINAR IN URBAN POLITICS.

885, READINGS AND RESEARCH IN PROBLEMS OF GOVERNMENT
886. IN GEORGIA.

POLITICAL THEORY

H-300 (SOCIOLOGY) SOCIAL THEORY (HONORS COLLOQUIUM).

A study of some major theories concerning man's political, economic, educational, and religious institutions, emphasizing a cross social science disciplinary approach.

408. AMERICAN POLITICAL THOUGHT TO 1800.

A study of the political theory of the colonial period, the American Revolution, and the theories of the Convention of 1787 and the early interpretation of the Constitution. Political Science 408 and 409 form a natural sequence, though either or both may be elected.

409. AMERICAN POLITICAL THOUGHT SINCE 1800.

A study of the theories as to the nature of the Union, slavery, Civil War, Reconstruction, and the contemporary United States.

485. POLITICAL PHILOSOPHIES OF ANCIENT, MEDIEVAL, AND EARLY MODERN TIMES.

A historical study of the development of ideas relative to the state and government in ancient, medieval, and early modern times. Attention is directed primarily to the political thought of a selected group of eminent philosophers.

486. POLITICAL PHILOSOPHIES OF RECENT TIMES.

This course forms a sequence to Political Science 485. Either of the courses may be taken separately, but since emphasis is given to the growth of political thought, it is preferable to take the early period first.

801. SCOPE AND METHOD IN POLITICAL SCIENCE.

COMPARATIVE GOVERNMENTS AND INTERNATIONAL RELATIONS

330. MAJOR EUROPEAN POLITICAL SYSTEMS.

A comparative description and systematic analysis of political institutions and processes in the major European political systems. Emphasis is also given to various approaches to comparative analysis.

351. GOVERNMENT AND POLITICS OF BRITAIN.

The structure and functioning of British government. Policy and administration in several fields of national and international importance will be studied.

415. THE GOVERNMENTS OF THE FAR EAST.

The structure, principles and practices of political parties and governments of the Far East with particular emphasis on China and Japan.

420. INTERNATIONAL RELATIONS.

An introductory study of the forces and practices dominating contemporary international political relations.

421. INTERNATIONAL ORGANIZATION.

The principles, organizations, and functions of international governmental organizations, such as the United Nations, Organization of American States, Council of Europe, the Specialized Agencies, the international judiciary, etc.

422. INTERNATIONAL LAW.

The elements of international law, chiefly as applied and interpreted by the United States.

423. ELEMENTS OF INTERNATIONAL LAW.

A continuation of Political Science 422.

431. DEVELOPING POLITICAL SYSTEMS. Prereq: Pol. Sci. 330 or permis-

sion of instructor. For graduate credit, 10 hours of senior division courses.
A comparative analysis of political institutions and behavior in selected Afro-Asian Commonwealth countries with special emphasis on the political dynamics of modernization in developing areas.

432. **MAJOR COMMUNIST POLITICAL SYSTEMS.** Prereq: 10 hours in political science, history, or economics.
An analysis of political processes and governmental institutions in the USSR and Mainland China. Analysis will be made of the implications of changes in these systems for an understanding of contemporary Communism.
433. **COMPARATIVE EASTERN EUROPEAN POLITICAL SYSTEMS.** Prereq: 10 hours senior division work in political science, history, or economics.
A comparative analysis of the political systems of Eastern Europe (excluding the USSR). While emphasis is placed on post-1944 developments, attention is given the constitutional and political systems between the World Wars.
434. **LATIN AMERICAN POLITICAL SYSTEMS.** Prereq: 10 hours senior division work in political science, history, or economics.
A comparative analysis of the political systems of Central and South America with emphasis on the concepts of political stability, conflict, revolution, and economic development and modernization.
820. **READING AND RESEARCH IN INTERNATIONAL POLITICS**
821. **READING AND RESEARCH IN INTERNATIONAL ORGANIZATION**
822. **PROBLEMS OF PUBLIC INTERNATIONAL LAW**
830. **SEMINAR IN COMPARATIVE SYSTEMS ANALYSIS**
831. **READINGS AND RESEARCH IN COMPARATIVE POLITICAL SYSTEMS**

PUBLIC ADMINISTRATION

441. **PRINCIPLES OF PUBLIC ADMINISTRATION.**
General principles and problems of administrative organization, relationships, and controls in the United States. Problems of personnel, finance, administrative law, and the growth and significance of administrative legislation and adjudication.
442. **PUBLIC PERSONNEL ADMINISTRATION.**
Procedures and problems of governmental personnel administration. Human relations aspects. Studies of governmental agencies are employed to give the students first hand knowledge of governmental personnel administration.
443. **PUBLIC FINANCE ADMINISTRATION.**
Activities involved in the collection, custody and expenditure of public revenue, namely: the assessment and collection of taxes, public borrowing and debt administration, the preparation and enactment of the budget, financial accountability and the audit.
445. **COMPARATIVE ADMINISTRATION.**
A study of the administrative structures and practices of selected western and non-western countries with major emphasis on the differences and similarities.
446. **GOVERNMENT ORGANIZATION AND ADMINISTRATIVE THEORY.**

A systematic analysis of theories of organization, management and administration. Special consideration will be given to institutional, behavioral and psychological factors.

492. ADMINISTRATIVE LAW.

The legal principles and practical doctrines involved in the work of administrative agencies vested with quasi-legislative or quasi-judicial powers.

841. PROBLEMS IN PUBLIC ADMINISTRATION

Psychology (PSY)

(New College and Meigs Hall)

Head: Hammock. Staff: Adams, Ascough, Barry, Butler, Craig, Darby, Fowler, Hammes, Hazen, Hodge, James, McBee, McCranie, McDaniel, Moss, Mulligan, Noble, Osborne, Peacock, Sipprelle, Sisson, Strain, Taylor, Trice, Unikel, Wildman, Williams, Young, Zachert.

Psychology 101 is a prereq: to all other courses in psychology, except Psychology 99, H-103 (203), 200, and 258. Psychology 322 is a prerequisite for all 400 level courses and is required of all majors.

99. READING AND STUDY SKILLS. No credit. Five class meetings including two hours individual practice.

A non-credit course designed for improving reading skills to a level adequate for college study. Includes study and practice of: comprehension of varied materials; adapting speed of reading to purpose and materials; vocabulary skills; and efficient use of study time.

101. ELEMENTARY PSYCHOLOGY.

A beginning course in psychology, given without laboratory experiments. It includes the fundamental facts and laws of psychology and indicates something of the various problems and fields of psychology, its relation to other fields, and some of the more important applications of psychology.

H-103 (203). GENERAL PSYCHOLOGY (HONORS). Not open to students with credit in Psychology 101. 5 hours.

A survey of general psychology, with emphasis on theoretical issues in current psychology and on methodological problems encountered in the area.

200. (MATHEMATICS AND STATISTICS) ELEMENTARY STATISTICS. Prereq: Mathematics 100. (Students using this course in the major division, register for Psychology 200).

A basic course at a level which does not require a knowledge of calculus.

258. THE PSYCHOLOGY OF ADJUSTMENT.

A course in mental hygiene, dealing with the appropriate and inappropriate reactions to frustration and stress. Solutions of conflicts, fears, and anxiety. Building emotional stability and preventing mental illness.

371. APPLIED PSYCHOLOGY.

A survey of the applications of the principles of psychology to social, professional, industrial, governmental, and educational fields.

GENERAL-EXPERIMENTAL PSYCHOLOGY

300. SPECIAL PROBLEMS. 2-5 hours. Prereq: Twenty hours in psychology. A course designed for the advanced undergraduate student who wishes to conduct independent study and research.
322. EXPERIMENTAL PSYCHOLOGY. Lecture and discussion with periodic laboratory periods. Prereq. or co-requisite: Psychology 200 or Mathematics 357, or consent of instructor.
An introduction to experimental method in the study of behavior. Class and laboratory work are designed to acquaint the student with the logic of science and psychology, the principles of experimental design, the research techniques of psychophysics and psychological scaling.
330. BIOLOGICAL FOUNDATIONS OF BEHAVIOR. Prereq: Psychology 200 and 322.
Introduction to empirical studies in physiological, sensory, and comparative psychology. Laboratory work will offer direct experience with basic concepts and methods in these areas.
332. BEHAVIOR ANALYSIS AND THEORY. Prereq: Psychology 200 and 322.
Introduction to empirical studies in the areas of learning, perception, and motivation. Laboratory work will offer direct experience with basic concepts and methods of these areas.
334. SOCIAL AND PERSONAL BEHAVIOR. Prereq: Psychology 200 and 322.
Introduction to empirical studies in the areas of personality and development, and social behavior. Laboratory work will offer direct experience with basic concepts and methods in these areas.
374. GENETIC PSYCHOLOGY.
The evolution of structure and behavior. The problems of childhood, maturity, and senescence as integral parts of the life cycle are given careful study.
404. HISTORY OF PSYCHOLOGY. 5 hours. Prereq: 5 hours credit in senior division psychology.
An overview of the history of psychology and recent systematic developments.
405. SYSTEMS IN PSYCHOLOGY. Prereq: Psychology 404.
An investigation of the theoretical systems in psychology since 1880, with emphasis upon the types of research which these systems have produced.
452. THEORIES OF MOTIVATION. 2 hours.
Cognitive and neurological theories of motivation. Current experimental research in the area of motivation.
455. PSYCHOLOGY OF LEARNING. Prereq: Psychology 322.
An empirical and theoretical study of classical and instrumental conditioning, discrimination learning, the acquisition of complex skills, and response elimination.
456. PSYCHOLOGY OF SENSATION. Prereq: Psychology 322 or equivalent.
Current experimental findings and theories of vision, audition, kinesthesia, vestibular function, the skin senses, and chemical sensitivity.
457. PSYCHOLOGY OF PERCEPTION. 3 hours. Prereq: Psychology 322.
The phenomena of perception are investigated. Empirical and experimental

demonstrations are conducted, followed by a study of the various theories of perception.

466. (SPEECH) PSYCHOLOGY OF SPEECH. Prereq: Speech 108 and Psychology 101 and 2 senior division courses in speech, classics, psychology, or English.

The use of symbols, the speech personality, emotional reactions and higher mental processes in speech, psychological studies of language and vocal and visual symbolism.

472. (EDUCATION) PROGRAMMED INSTRUCTION. Prereq: Psychology 101 or Education 304.

A study of the theory, evaluation and writing techniques of programmed instruction with practice in writing a program.

480. PHYSIOLOGICAL PSYCHOLOGY. Prereq: 10 hours in biology.

Personality is viewed as the integration of the morphological, physiological and psychological aspects of the organism. The relationship between the internal environment and such behaviors as food intake control; mating behavior, neural action; emotion; etc.

481. COMPARATIVE PSYCHOLOGY. Prereq: 10 hours in biology.

An analysis of the structure and behavior of the amoeba and the animal series to man. The integration of structure, psychological processes and behavior are emphasized throughout the course, resulting in a more thorough understanding of the adjustment processes.

INDUSTRIAL, BUSINESS AND PERSONNEL PSYCHOLOGY

414. PSYCHOLOGY OF PERSONNEL.

A survey of the entire area of personnel psychology applied to the fields of business, industry and government.

561. (BUSINESS ADMINISTRATION) BEHAVIORAL THEORY AND MARKETING. Prereq: Marketing 360.

The psychology of decision formation and action are analyzed in relation to the motives, attitudes, and expectations of consumer and businessmen that contribute to the marketing process.

582. (BUSINESS ADMINISTRATION) PERSONNEL MEASUREMENT. Prereq: Economics 312 or Psychology 200.

A study of quantitative methods applicable to the measurement of personnel and their work behavior in the business setting; methods of evaluating job performance and program effectiveness.

586. (BUSINESS ADMINISTRATION) PRINCIPLES OF COMPENSATION AND FINANCIAL INCENTIVES. Prereq: Economics 312 or Psychology 200.

A study of job evaluation and other procedures that lead to the development of a sound wage and salary structure; problems of administration, executive compensation, and financial incentives.

587. (BUSINESS ADMINISTRATION) WORK AND EFFICIENCY. Prereq: Economics 312 or Psychology 200.

Human factors in relation to work and equipment design; principles of work measurement.

588. (BUSINESS ADMINISTRATION) PERSONNEL SELECTION AND PLACEMENT. Prereq: Management 584.

A study of methods applicable to the development of valid standards of personnel selection and placement with the use of psychological tests, the personal interview, and other kinds of personal data.

PSYCHOLOGICAL TESTING

403. TEST CONSTRUCTION. 2 hours.

Theory of psychological measurement, criterion, development, concepts and methods of determination of reliability and validity, and writing of test items.

415. PSYCHOMETRICS.

A course designed to give the student an introduction to the essentials of psychological testing with experience in administering, scoring, and interpreting tests, including those of scholastic achievement, mental ability, scholastic aptitude, interest and personality.

416. INDIVIDUAL PSYCHOLOGICAL TESTING: WECHSLER-BELLEVUE METHOD. 3 hours. Prereq: Psychology 415.

Training in the administration, scoring and interpretation of the Wechsler Scales. A minimum competency in the use of these scales for both children and adults is required but the major part of the practical work may be in the age range selected by the student.

418. INDIVIDUAL PSYCHOLOGICAL TESTING: TERMAN-MERRILL SCALES. 2 hours. Prereq: Psychology 415.

Training in the administration, scoring and interpretation of the Terman-Merrill Scales. A minimum competency in the use of these scales for both children and adults is required but the major part of the practical work may be in the range selected by the student.

419. INTRODUCTION TO PROJECTIVE TECHNIQUES: RORSCHACH METHOD. 3 hours. Prereq: Consent of instructor.

An introduction to the theory, administration, scoring and interpretation of Rorschach Method. The class is limited and is open only to advanced students with adequate background in psychological measurement and theory of personality.

420. INTRODUCTION TO PROJECTIVE TECHNIQUES: THEMATIC APPERCEPTION TEST. 2 hours. Prereq: Consent of instructor.

An introduction to the theory, administration, scoring, and interpretation of the Thematic Apperception Test. The class is limited and is open only to advanced students with adequate background in psychological measurement and theory of personality.

PERSONALITY AND SOCIAL

395. INTRODUCTION TO CHILD DEVELOPMENT. (See Home Economics 395).

373. (SOCIOLOGY) SOCIAL PSYCHOLOGY. 3 hours.

The social aspects of psychology; the origin and development of social be-

havior, interaction of individuals with groups, social motivation, suggestion, and attitudes. Methods of research in social psychology with special attention to use of experimental techniques.

421. **THE STUDY OF CONFLICT.** Prereq: 15 hours of psychology and 5 hours of statistics.
Methods of measuring conflict are described, and contemporary experimentation employing various indices of conflict is analyzed.
422. **EXPERIMENTAL DESIGN IN PSYCHOPATHOLOGY.** Prereq: 15 hours of psychology and 5 hours of statistics.
An exposition of successful research designs in psychopathology. The design and refinement of workable experiments directly relevant to the area of behavior disorders.
423. **PSYCHOLOGY OF THE ABNORMAL.** Lectures, discussions and clinical work.
The study of the various forms of mental illness and maladjustment, including mental deficiency, and anti-social behavior. The course is planned especially for students going into clinical psychology, medicine, nursing, social work or special types of educational work.
440. **(SOCIOLOGY) SOCIAL PSYCHOLOGY: ATTITUDE MEASUREMENT.** 2 hours.
Theories and methods of construction of attitude scales: This will consist of an examination of the assumptions and procedures involved in the Thurstone, Likert, and Guttman scaling techniques.
451. **THEORIES OF PERSONALITY.**
The biological and psychological foundations of personality will be studied. Emphasis will be placed on the integrated aspects of personality.
453. **INDIVIDUAL DIFFERENCES.** 3 hours.
The nature and interrelationships of psychological traits; the relationships between behavioral and structural characteristics; theories of constitutional types; the distribution of individual differences; effects of heredity, growth, and training.
459. **MENTAL HYGIENE.**
An advanced course dealing with mental hygiene problems, especially of children and adolescents; problems of different stages of maturation adjustments in the home, school and play group; and special needs in cases of retardation and delinquency.
460. **DYADIC INTERACTION ANALYSIS.**
Methods applicable to the analysis of dyadic interaction are studied.
464. **ADVANCED SOCIAL PSYCHOLOGY.** 3 hours. Prereq: Psychology 373.
Development and importance of language and communication in social behavior; concepts and methods of studying decision-making; the role of motivation, frustration, and conflict in social processes.
465. **METHODS AND PRACTICES IN CLINICAL PSYCHOLOGY.**
Students will be instructed in diagnostic evaluations, psychological treatment, and clinical research. They will observe the functioning of the different dis-

ciplines involved in a mental hospital, and will become familiar with the total operation of the hospital.

498. (HOME ECONOMICS) DEVELOPMENT OF THE YOUNG CHILD.
Prereq: Psy. 101 and 395 or equivalent. Four lectures and two periods of supervised observation in nursery school and infant center. The physical, mental, emotional, and social development of the preschool child, and the origins of psychological processes; in laboratory work, special reference to techniques of guidance.
691. BIOLOGICAL FOUNDATIONS OF BEHAVIOR I. Prereq: Consent of instructor.
An intensive survey of the historical, physiological and sensory foundations of modern concepts of behavior.
692. BIOLOGICAL FOUNDATIONS OF BEHAVIOR II. Prereq: Consent of instructor.
An intensive survey of the literature in comparative psychology, motivation, and perception.
804. ANIMAL LEARNING
805. THEORIES OF LEARNING
806. VISION
807. AUDITION
808. SKIN SENSES
- 811, 812. CLINICAL PROCEDURES IN PSYCHOLOGY
- 813, 814. CLINICAL PROCEDURES IN PSYCHOLOGY
815. RORSCHACH INTERPRETATION
816. PSYCHOLOGY SEMINAR
840. INSTRUMENTATION IN BEHAVIORIAL RESEARCH
850. CLINICAL STAFFING PROCEDURES
853. PSYCHIATRIC METHODS
861. PSYCHOPHYSICAL METHODS
863. EXPERIMENTAL DESIGN
864. PSYCHOLOGICAL SCALING METHODS
892. (HOME ECONOMICS) BEHAVIOR PROBLEMS IN CHILDREN
900. SPECIAL PROBLEMS
920. CLINICAL INTERNSHIP IN PSYCHOLOGY
930. THESIS IN PSYCHOLOGY

Romance Language (ROM)

Head: Hassell. Staff: Blackburn, Carter, Cox, Davis, DeGorog, Hernández, Jordan, Linker, Lundelius, McNeal, Peterson, Ramirez, Rasmussen, Schrecker, Seamon, Thornton, Upchurch, Ziomek.

A student continuing a language taken in high school will be placed in the appropriate course on the basis of scores on the College Entrance Examination Board Scholastic Achievement Tests and other pertinent information.

No student may receive credit for any course which is a prerequisite to a course for which he has already received college credit. Exception may be made only by the head of the department.

A student who has satisfied the language requirement for his degree in one foreign language may count the courses taken during his junior and senior years in any other foreign language, regardless of course numbers, towards his senior division requirements.

French (FR)

101. **ELEMENTARY FRENCH.** 10 hours.

102. (Students in this course may be required to spend a minimum of one hour a week outside of class in the language laboratory.)

A course designed to teach the student to pronounce French, to conduct simple conversations, and to read texts within a limited vocabulary range. Oral practice, emphasis upon sentence patterns, and the fundamental principles of structure.

103. **INTERMEDIATE FRENCH.** Prereq: French 102 or two entrance units in French.

Intensive and extensive reading. Texts of moderate difficulty selected from well known authors. A rapid review of French grammar, irregular verbs, and idioms.

104. **INTERMEDIATE FRENCH.** Prereq: French 103 or its equivalent.

Intensive and extensive reading of texts of marked literary merit. Pronunciation and conversation. Prepares students to read French in their specialized fields, to enter courses in French literature (201 or 202), or to enter courses in conversation and composition (106).

106. **INTERMEDIATE FRENCH CONVERSATION AND COMPOSITION.** Prereq: French 104.

The emphasis is divided between conversation (three days a week) and composition (two days a week). The two phases of the course are correlated to promote the student's ability to express himself accurately whether in speaking or in writing French. A strongly suggested elective for anyone planning to major in French.

H-114 (214). **INTERMEDIATE FRENCH (HONORS).** Prereq: French 101 and 102 or two entrance units in French.

Honors students who do satisfactory work in this course may substitute it for French 103 and 104. It is not available for students who have had either French 103 or 104 or both. Grammatical construction is reviewed through reading, and there is intensive classroom work and extensive outside reading.

120. **TECHNIQUES IN TRANSLATION.** Prereq: French 103 or its equivalent. Review of grammar, idioms and vocabulary; practice in translating moderately difficult technical and non-technical French texts into correct English.

Any course numbered below 200 is considered elementary and will not count

toward the minimum of 20 hours required in one subject for a major in language.

201. AN INTRODUCTION TO THE STUDY OF FRENCH LITERATURE.
Prereq: French 104.
A study of the main literary movements and major works of representative French writers from the twelfth through the seventeenth centuries.
202. AN INTRODUCTION TO THE STUDY OF FRENCH LITERATURE.
Prereq: French 104.
A study of the main literary movements and major works of representative French writers of the eighteenth and nineteenth centuries.
French 201 and 202 are prerequisite to the following French course except as indicated. French 202 may be taken either before or after French 201.
430. THE ROMANTIC MOVEMENT IN FRANCE.
The origins of the movement in France with the principal emphasis upon Rousseau, Chateaubriand, and Madame de Stael. Foreign influences. The formation of the *cénacles*. Chief literary manifestoes. Analysis of representative works; Lamartine, Hugo, Vigny, Musset and minor poets—poetry, novels, and drama. Collateral reading, reports, and a term paper. This course is designed as the first of a series of three; it should be followed by 431 and 432.
431. THE FRENCH NOVEL SINCE ROMANTICISM.
The novel as it evolved from Romanticism to Realism and from Realism to Naturalism. Analysis of subjective elements and of character development. The cult of form. The increasing influence of science. The reaction against Naturalism. Primary attention to Stendahl, Balzac, Flaubert, and Zola. Lectures and collateral reading. This course is designed to follow 430 and to correlate with 432.
432. FRENCH DRAMA AND POETRY SINCE ROMANTICISM.
Baudelaire, The Parnassians: Leconte de Lisle and Hérédia. The Symbolists: Verlaine, Mallarmé, etc. The Mid-Nineteenth Century Social Drama of Dumas fils and Augier, Henry Becque, Antoine and the origins of the Little Theatre Movement. The Post-Naturalistic Drama of Maeterlinck, Porto Rico, Rostand, and others. Attention will be given at the end of this course to the development of French literature in all genres at the conclusion of the nineteenth century and the beginning of the twentieth century. Lectures, analysis of texts, collateral reading. The course is designed to follow 430 and to correlate with 431.
433. FRENCH DRAMA OF THE TWENTIETH CENTURY.
French drama since the first World War with its intellectual, cultural and social backgrounds. The new *animateurs de théâtre*, new concepts of tragedy, avant-garde theatres. Special emphasis will be placed on the plays of Claudel, Rostand, Lenormand, Bourdet, Giraudoux, Anouilh, Cocteau, Montherlant, Sartre and Camus.
434. THE FRENCH NOVEL OF THE TWENTIETH CENTURY.
The French novel since 1920 with its intellectual, cultural, and social backgrounds. Special emphasis will be placed on the works of Gide, Proust, Malraux, Mauriac, Sartre, Camus, Giono and Montherlant. The avant-garde novels and regional novels of the period will also be discussed.

459. FRENCH LITERATURE OF THE SEVENTEENTH CENTURY—First half.

The growth of the Classic Ideal with emphasis on the political, religious, social, and artistic background of the period. The evolution of poetic and prose styles with emphasis upon Malherbe, Descartes, Pascal, and Bossuet. The development of the classic tragedy with Pierre Corneille. This course will not be arbitrarily limited to the literature before 1660 but will deal as fully as possible with such authors as Boileau and LaFontaine in order that 460 may concentrate on two writers only. Lectures, analysis of texts, collateral reading.

460. FRENCH LITERATURE OF THE SEVENTEENTH CENTURY—Second half.

This course will concentrate almost exclusively on Racine and Molière. A study of dramatic techniques and analysis of characters. Many plays will be read and discussed in class; others will be assigned for collateral reading. Lectures and criticism of texts. This course is designed to follow 459.

461. FRENCH LITERATURE OF THE EIGHTEENTH CENTURY.

The growth of French rationalism. The growth of sensibility. *Belles-Lettres*. Bayle, Fontenelle, Montesquieu, Voltaire, Rousseau, Diderot, d'Holbach, Condillac, Helvetius; Marivaux, Lesage, Beaumarchais, Andre Chenier, and others. Lectures, collateral reading, analysis of texts.

556. ADVANCED FRENCH SYNTAX AND COMPOSITION. No prerequisite beyond French 104.

Comprehensive review; suggested for teachers of French.

557. FRENCH PHONETICS. Prereq: French 201-202 or French 106.

A careful analysis of each of the sounds in the French language followed by intensive drill in the accurate pronunciation of these sounds in connected discourse. Practice in phonetic transcription; use of records and films for drill in intonation and conversation.

581. (EDUCATION) PROBLEMS OF TEACHING ROMANCE LANGUAGES. Prereq: French or Spanish 201-202 or 15 hours of education in addition to French or Spanish 104.

History of method, psychology of language learning, values, objectives, teacher's library, technique of oral work, pedagogy of phonetics, phonetics applied to grammar, pedagogy of vocabulary and reading. Visual aids and realia, individual differences, tests and measurements. Evaluation of texts, course content.

805. FRENCH LITERATURE OF THE SIXTEENTH CENTURY

806.

809. SEMINAR ON ROMANTICISM

810,

811.

812. SEMINAR ON THE NINETEENTH CENTURY NOVEL

813,

814.

820. SEMINAR ON 20TH CENTURY LITERATURE
 821.
 822.
 830. BAUDELAIRE AND THE SYMBOLISTS
 850. READINGS AND RESEARCH IN FRENCH LITERATURE
 851.
 870. INTRODUCTION TO OLD FRENCH
 871.
 872. INTRODUCTION TO OLD FRENCH LITERATURE
 875. MIDDLE FRENCH LITERATURE
 876.

Italian (ITAL)

101. ELEMENTARY ITALIAN. 10 hours.
 102. (Students in this course may be required to spend a minimum of one hour a week outside of class in the language laboratory.) Grammar and composition, conversation, reading and dictation.
 103. INTERMEDIATE ITALIAN. Prereq: Italian 102.
 Intermediate grammar, reading, conversation, dictation, and composition.
 104. ITALIAN GRAMMAR, COMPOSITION, AND CONVERSATION. Prereq: Italian 103.
 Intermediate reading and conversation.
 *201. INTRODUCTION TO ITALIAN LITERATURE. Prereq: Italian 104.
 A study of the main literary movements and major works of representative Italian writers from the beginning through the 17th Century.
 *202. INTRODUCTION TO THE STUDY OF ITALIAN LITERATURE.
 Prereq: Italian 104.
 A study of the main literary movements and major works of representative Italian writers of the 18th and 19th Centuries.
 *May be taken in lieu of 104 to satisfy degree requirements when 104 is not offered.

Linguistics

460. AN INTRODUCTION TO GENERAL LINGUISTICS. Prereq: At least 20 hours of one foreign language, and permission of the instructor.
 An introduction to the study of language and the various techniques developed primarily in the U.S. in the 20th Century for the analysis of language. Provides students with a means of approaching languages of different structures, whether Indo-European or non Indo-European.

Provençal (PROV)

878. PROVENÇAL LANGUAGE AND LITERATURE
 879.

Romance Palaeography (ROM)

880. ROMANCE PALAEOGRAPHY

Spanish (SP)

Any course numbered below 200 is considered elementary and will not count toward the minimum of 20 hours required to major in language.

101. ELEMENTARY SPANISH. 10 hours.

102. (Students in this course may be required to spend a minimum of one hour a week outside of class in the language laboratory.) Pronunciation, fundamentals of grammar, reading and conversation.

103. INTERMEDIATE SPANISH. Prereq: Spanish 102 or two entrance units in Spanish.

A rapid review of Spanish grammar, irregular verbs, and idioms. Intensive and extensive reading.

104. INTERMEDIATE SPANISH. Prereq: Spanish 103.

Intensive and extensive reading of texts of marked literary merit. Pronunciation and conversation. Prepares students to read Spanish in their specialized fields, to enter courses in Spanish literature (201), or to enter courses in conversation and composition (106).

106. SPANISH CONVERSATION AND COMPOSITION. Prereq: Spanish 104.

The emphasis is divided between conversation (three days a week) and composition (two days a week). The two phases of the course are correlated to promote the student's ability to express himself accurately whether in speaking or in writing Spanish. A strongly suggested elective for anyone planning to major in Spanish.

H-114 (214). INTERMEDIATE SPANISH (HONORS). Prereq: Spanish 101 and 102 or two entrance units in Spanish.

Honors students who do satisfactory work in this course may substitute it for Spanish 103 and 104. It is not available for students who have had either Spanish 103 or 104 or both. Grammatical construction is reviewed through reading and there is intensive classroom work and extensive outside reading. Spanish will be used as the language of the classrooms.

120. TECHNIQUES IN TRANSLATION. Prereq: Spanish 103 or its equivalent.

Review of grammar, idioms and vocabulary; practice in translating moderately difficult technical and non-technical Spanish texts into correct English.

201. INTRODUCTION TO SPANISH LITERATURE. Prereq: Spanish 104.

A study of representative works of Spanish literature from its beginning through the Golden Age.

202. INTRODUCTION TO SPANISH LITERATURE. Prereq: Spanish 104.

A study of representative works of Spanish literature from the Golden Age to the present.

306. ADVANCED SPANISH CONVERSATION AND COMPOSITION. Prereq: Spanish 104.

Designed to develop audio-lingual skills and proficiency in the practical use of the written language, with emphasis on current idiomatic Spanish.

Spanish 201 and 202 are prerequisite to the following Spanish courses except as indicated. Spanish 202 may be taken either before or after Spanish 201.

417. GOLDEN AGE DRAMA—LOPE DE VEGA AND HIS CONTEMPORARIES.

A study of the origins of the Spanish theater through the first half of the Siglo de Oro, with particular emphasis on Lope de Vega and his contemporaries, Tirso de Molina and Juan Ruiz de Alarcón.

418. GOLDEN AGE DRAMA—CALDERÓN AND HIS CONTEMPORARIES.

A study of the representative works of the masters of the Siglo de Oro comedia, with special emphasis on Calderón de la Barca and his contemporaries, Francisco de Rojas Zorrilla and Augustín Moreto.

419. THE SPANISH NOVEL OF THE TWENTIETH CENTURY.

The development of the Spanish novel from the Generation of 1898 to Cela and recent tremendista novels. Special attention will be given to the novels of Baroja, Unamuno, Azorín, Valle-Inclán, R. Pérez de Ayala, G. Miró, Concha Espina, and Cela, with a discussion of experimentation and the problem of form in the modern novel.

420. THE SPANISH NOVEL OF THE NINETEENTH CENTURY.

A study of the Spanish novel from the beginning of costumbrismo, regionalism, and realism to the end of the nineteenth century, with particular emphasis on the novels of P.A. de Alarcón, Pereda, Valera, Pérez Galdós, Pardo Brazán, Palacio, Valdés, and the Valencian novels of Blasco-Ibáñez.

422. SPANISH PROSE OF THE GOLDEN AGE.

A study of the novel and short story of this period with emphasis on Cervantes.

423. THE DRAMA OF THE NINETEENTH CENTURY.

The development of Spanish drama from Moratín's neoclassic comedies to the realistic plays of Galdós and the early Benavente. Special emphasis will be placed on the romantic drama (Rivas, Zorrilla, García Gutierrez, and others), and on the subsequent search for modern realism and the comedy of manners (Bretón, Ventura de la Vega, Tamayo y Baus, López de Ayala, and Echeagaray).

424. SPANISH PROSE BEFORE THE GOLDEN AGE.

A study of the exemplar collections, *La Celestina*, the chivalresque, sentimental and Moorish novel.

425. THE SPANISH DRAMA OF THE TWENTIETH CENTURY.

The development of Spanish drama from Benavente to the present, with special emphasis on Benavente, Marquina, Martínez, Sierra, the Quinteros, García Lorca, Caspona, and Buero Vallejo. Technical innovation in the drama of Valle-Inclán, Azorín, García Lorca, and other vanguard plays will be discussed in the light of contemporary trends to the theater.

427. SPANISH POETRY OF THE GOLDEN AGE.

A study of the exemplar collections, *La Celestina*, the chivalresque, sententious attention to the epic, the ballad, and the poetry of Juan Rutz, the

Marqués de Santillana, Jore Manrique, Garcilaso de la Vega, Luis de León, Góngora, Lope de Vega, Calderón de la Barca, and others.

430. SPANISH-AMERICAN POETRY.
A study of the contribution of the Spanish-American nations to the development of poetry. Readings from representative poets of the several countries.
431. SPANISH-AMERICAN PROSE.
A study of the essay and novel as developed in the Spanish-American nations. Reading from representative writers of the several countries.
432. THE MODERNISTA MOVEMENT IN SPANISH-AMERICA.
A study of Rubén Darío, his contemporaries and followers.
526. ADVANCED SPANISH SYNTAX AND COMPOSITION.
A study of grammatical forms and usages with particular reference to the needs of those preparing to teach.
528. SPANISH PHONETICS.
A study of the organs of speech, the difference in production of Spanish and English speech sounds, and the various speech phenomena. Practice in phonetic transcription, pronunciation, and intonation.
581. (EDUCATION). PROBLEMS OF TEACHING ROMANCE LANGUAGES. Prereq: French or Spanish 201-202 or 15 hours of education in addition to French or Spanish 104.
History of method, psychology of language learning, values, objectives, pedagogy of techniques of oral work, pedagogy of phonetics, phonetics applied to grammar, pedagogy of vocabulary and reading. Visual aids and realia, individual differences, tests and measurements. Evaluation of texts, course content.
- 801, SEMINAR IN GOLDEN AGE LITERATURE
802,
803.
808. CERVANTES
- 811, SEMINAR IN THE NINETEENTH CENTURY SPANISH NOVEL
812,
813.
- 821, SEMINAR IN SPANISH DRAMA OF THE GOLDEN AGE
822,
823.
830. INTRODUCTION TO ROMANCE STYLISTICS
- 831, SEMINAR IN TWENTIETH CENTURY SPANISH LITERATURE
832,
833.
- 840, READINGS AND RESEARCH IN SPANISH-AMERICAN LITERATURE.
841. TURE.
- 850, READINGS AND RESEARCH IN SPANISH LITERATURE
851.

870. INTRODUCTION TO OLD SPANISH

871.

872. INTRODUCTION TO OLD SPANISH LITERATURE

Social Science (SOS)

(Peabody Hall)

Given under the general direction of the Chairman of the Division of Social Science.

104. CONTEMPORARY GEORGIA.

A discussion and analysis of certain aspects of Georgia's population, its characteristics and trends; its relative standing in various statistical measures of economic and social wellbeing; its natural resources and economic accomplishments from the standpoint of agriculture, industry, and commerce; and its governmental organization and problems.

Sociology (SOC) and Anthropology (ANT)

(Peabody Hall)

Head: Bates. Staff: Bailey, Barrow, Beard, Belcher, Bowles, Chappell, Clune, Cooper, Dean, Hudson, Huscher, Kelley, Kelly, Lowe, Miller, Nix, Polansky, Payne, Peddycoart, Robinson, Schlosser, South, Tarver, Wallis, Wingrove.

Majors in sociology must have the following courses in addition to Sociology 105 (or H-106/206) unless specifically exempted by the head of the department: Anthropology 102, Sociology 420, 422, and 490.

Note: All 400 and 500 courses have as a prerequisite Sociology 105 or the consent of instructor.

105. INTRODUCTORY SOCIOLOGY.

An introduction to the sociological analysis of society, its origins, structure, change and problems. Emphasis is on the nature of culture, social interaction, social groups and social institutions.

H-106 (206). INTRODUCTORY SOCIOLOGY (HONORS). (Not open to students who have credit for Sociology 105).

A general introduction to fundamental concepts, theories, methods, and major sub-fields of sociology. Among other purposes will be that of showing the relationships of sociology to other fields of study.

SPECIAL FIELDS OF SOCIOLOGY

260. CONTEMPORARY SOCIAL PROBLEMS.

A study of both general and special problems of our times. The problems are considered in the social and cultural setting in which they occur. The emphasis is upon people and their behavior.

301. STRUCTURE AND FUNCTIONING OF AMERICAN SOCIETY.

A functional analysis of major institutions and processes in contemporary American society.

407. JUVENILE DELINQUENCY.

A detailed analysis of the nature, extent, and causes of juvenile delinquency,

and an evaluation of treatment or preventive programs designed to reduce this area of behavior.

409. SOCIAL CHANGE.

The nature and theories of social change; causes and types of social change; the cultural lag theory; the social effects of inventions in the modern world; the adjustments of contemporary social institutions to technological change; and some discussion of the impact of future technology on society.

410. SOCIOLOGY OF MEDICINE.

A sociological analysis of (1) the recruitment and professionalization of medical and nursing students, (2) the role of the doctor, (3) the organization and functions of the contemporary general hospital, (4) the mental hospital as a total institution, (5) the impact of third-party payments on medical institutions, and (6) social and cultural factors in the epidemiology and treatment of organic lesions and mental illness.

411. SOCIAL ORGANIZATION.

A study of the basic principles of social organization including an examination of how groups and complex organizations such as associations, communities and societies are structured and how they function as structures.

412. SOCIAL DISORGANIZATION.

A study of the causes and consequences of social disorganization in society including an examination of the relationship between impairment in the functioning of social institutions and such consequences of social disorganization as crime, delinquency, mental illness, divorce, unemployment, and so forth.

427. PERSONALITY AND SOCIAL STRUCTURE.

Foundation and development of personality; mechanisms of integration and adjustment; roles of culture, groups and language; concepts of self; types and theories of personality; divergent personalities.

431. RURAL SOCIAL SYSTEMS.

A study of socio-economic aspects of agriculture and of conditions and movements in rural population with consideration of rural, social elements and agencies, rural-urban relations, and American agricultural institutions.

432. THE SOCIOLOGY OF URBAN LIFE.

Development of the city as a social phenomenon in the modern world. Analysis of urban trends, characteristics, functions, and social organization. Sociological elements in urban planning, housing and metropolitan dominance, and growth patterns in new centers of urbanization.

433. POPULATION THEORY AND PROBLEMS.

Theory and dynamics of population growth; population measure; migration; composition; differential fertility; theories of the quality and optimum population; economic and social aspects of our population.

434. SOCIAL CONTROL.

A study of social techniques by which conformity to norms and behavior expectations is produced and maintained within society.

435. THE COMMUNITY.

A study of the community as a unit of social organization; contemporary trends in contemporary organization and planning.

437. RACE RELATIONS IN THE UNITED STATES.

An examination of the social problems associated with race and race relations in contemporary American society.

443. SOCIAL MOBILITY.

The nature of social status systems, including the means by which people obtain and change their positions in the systems. Topics include: criteria of status evaluation; social classes and castes; differential life-chances; mobility ladders and achievement aspirations.

461. (HOME ECONOMICS) THE FAMILY.

Family study from many different angles, utilizing data from the fields of anthropology, individual and social psychology, history, sociology, economics and psychiatry.

471. PHILOSOPHY OF SOCIAL SCIENCES. (Philosophy 471).

A study of the methods and problems of inductive reasoning, including the nature of probable inference, techniques of verification, and the structure of scientific explanation, with special reference to the Social Sciences.

480. INDUSTRIAL SOCIOLOGY.

A study of human relations in the industrial setting and the relationship of growing, operating or declining industrialization to the community and the larger society.

481. CRIMINOLOGY.

The study of criminal behavior and its treatment. The development of criminal behavior in contemporary society and the efforts of the individual to adjust to the demands made upon him. The treatment of the offender by means of probation, imprisonment, and parole.

485. SOCIOLOGY OF OCCUPATIONS.

A study of occupations and professions in modern industrial societies with emphasis on their structure and functioning as roles in social organizations. Consideration will be given to such topics as occupational prestige, mobility, recruitment, socialization, and professionalization.

490. SENIOR SEMINAR IN SOCIOLOGY. (Open to undergraduates only).

Prereq: Senior standing and 15 hours in senior college sociology and anthropology courses. Required of all majors in sociology.

A program of semi-independent study including reading, writing, and discussions, treating current literature and developments in the field of sociology; designed to assist the senior in integrating his sociological background and using it creatively.

495. COMPLEX ORGANIZATIONS.

Major approaches to the study of large organizations; theories of bureaucratic structure; relationship of personality to formal and informal structures.

502. COMMUNITY DEVELOPMENT.

Analysis of social and cultural factors in programs for community development.

521. GROUP DYNAMICS. Prereq: Sociology major, senior standing; or graduate standing in sociology or related fields.

A review of the development of research on processes in the small face-to-

face group, with emphasis on motivational forces involved. Primary focus is to be on the theory, but relationships to group leadership and management in a variety of settings will be demonstrated.

Social Theory and Research Methods

SOCIAL THEORY AND RESEARCH METHODS

H-300. (POLITICAL SCIENCE). SOCIAL THEORY (HONORS COLLOQUIUM).

A study of some major theories concerning man's political, economic, educational, and religious institutions, emphasizing a cross social science disciplinary approach.

356. ELEMENTARY RESEARCH METHODS IN SOCIOLOGY.

An introduction to the scientific method of social research; elementary considerations in research design; the interview, questionnaire, participant observation and human documents as sources of social data; qualitative and quantitative techniques of analysis and inference, including the development of techniques for measuring social data.

401. RESEARCH TECHNIQUES IN SMALL GROUPS.

This course is designed to familiarize students with methods and techniques peculiar to small group research. Particular emphasis will be given to the use of Bales' Modern Methods category for Interaction Process Analysis. The class will replicate several of the classic experiments in small group research.

420. METHODS OF SOCIAL RESEARCH. Required of all majors in sociology.

An introduction to the scientific method of social research; elementary considerations in research design; the interview, questionnaire, participant observation and human document as sources of social data; qualitative and quantitative techniques of analysis and inference, including the development of techniques for measuring social data.

421. EARLY SOCIAL THOUGHT.

A survey of social thought from Hammurabi to Comte. This course affords an introduction to social thought prior to the emergence of the modern social sciences.

422. DEVELOPMENT OF SOCIOLOGICAL THEORY.

A survey of some of the most important systems in the development of sociological theory. Required of all majors in sociology.

426. MODERN SOCIOLOGICAL THEORY. Prereq: Sociology 422.

A systematic analysis of the trends and developments in sociological theory since about 1920. Particular emphasis is placed on the current state of sociological theory and its relationship to empirical research.

456. TECHNIQUES OF POPULATION ANALYSIS.

Techniques for analyzing the composition of the population; constructing life tables; measuring vital processes; and estimating population and migration.

460. SURVEY RESEARCH. Prereq: Sociology 420 or equivalent.

Objectives, techniques, and uses of the sample survey in social research as

exemplified in public opinion studies, attitude and information surveys, and evaluation of organizational community programs.

559. COMMUNITY RECONNAISSANCE METHODS. Prereq: Sociology 435 or equivalent.

A study and application of methods of research in community organization for action programs. The application will include schedule preparation, field interviews, analysis of data, preparation of community reports.

Social Work

315. THE FIELD OF SOCIAL WORK.

An introductory course to the various aspects of present-day social work. Considers family and children's services, behavior clinics and case work approach to social problems, the courts, probation and parole, medical social services, group work, community organization, public assistance, and social security. Class discussion and collateral reading.

470. INTRODUCTION TO PUBLIC WELFARE ADMINISTRATION.

Historical development of public welfare services and their administration. Reference is made to the underlying problems with which present day public welfare departments deal; special attention is paid to administration at local, state, and federal levels.

552. PRINCIPLES AND METHODS OF SOCIAL CASEWORK.

Methods, objectives, competencies, limitations of social casework in its varied settings. Cases studied include school, psychiatric, correctional, child welfare, family, and medical problems.

800. SPECIAL TOPICS IN SOCIOLOGY

805. ADVANCED SOCIOLOGICAL ANALYSIS

808. ADVANCED PRINCIPLES OF SOCIOLOGY

820. SEMINAR IN SOCIOLOGICAL THEORY AND RESEARCH

821,

822.

840. SEMINAR IN SOCIOLOGY AND ANTHROPOLOGY

930. THESIS IN SOCIOLOGY

Social Anthropology (ANT)

102. MAN AND HIS CULTURE.

An introduction to the study of man as a cultural animal, the development of human societies from preliterate beginnings, the rise of complex social organizations with an outline study of the major cultures developed by man. *Required of all sociology majors.*

- H-112 (212). MAN AND HIS CULTURE (HONORS). (Not open to students who have credit for Anthropology 102.)

An introduction to the study of man as a cultural animal, the development of

human societies from preliterate beginnings to the rise of complex social organization with an outline study of the major cultures developed by man.

310. **INTRODUCTORY ETHNOLOGY.** Prereq: Anthropology 102 or introductory course in another social science.
An introduction to the basic principles of ethnology, the historical and analytical study of primitive cultures. A number of primitive cultures will be surveyed. These will be selected to give the fullest possible coverage in terms of area, race, and culture type.
400. **(ECONOMICS) EARLY ECONOMIC SYSTEMS.** Prereq: Anthropology 102 and Economics 105.
The economic life of primitive peoples. Concepts and principles of classical economics, developed in Western civilization, are studied in the light of practices and thought among primitive groups in Asia, Africa, and the South Pacific.
402. **THE AMERICAN INDIAN.**
A survey course on the cultural development of the aboriginal population of the New World.
405. **CULTURAL ANTHROPOLOGY.**
Concepts and methods for analysis of the institutions of non-literate peoples and their comparison with modern societies.
410. **SOCIAL ORGANIZATION OF PRIMITIVE PEOPLES.**
A study of the social organization of primitive peoples. Concepts and methods for the analysis of social institutions of non-Western European societies.
411. **COMPARATIVE BELIEF AND VALUE SYSTEMS.**
A survey of anthropological research and theory on belief and value systems in preindustrial and primitive societies, with special emphasis on primitive religious, magical, and scientific beliefs.
444. **LATIN-AMERICA: PEOPLES AND INSTITUTIONS.**
The study of contemporary Latin-American peoples and institutions in their community setting; special attention is devoted both to the original impact of Western civilization on the indigenous Indian communities of Central and South America, and to recent social changes incident to the introduction of modern agricultural and industrial technology.
445. **AFRICA: PEOPLES AND INSTITUTIONS.**
The study of peoples and institutions of Africa, south of the Sahara, starting with earliest evidences of indigenous peoples; special emphasis will be placed on changes currently taking place.
452. **HISTORY OF ANTHROPOLOGICAL THEORY.** Prereq: Anthropology 102 or equivalent.
A survey of the development of anthropological theory.
480. **INTRODUCTION TO ANTHROPOLOGICAL LINGUISTICS.**
An introduction to structural linguistics from the standpoint of anthropology, emphasizing elementary descriptive techniques and a consideration of the relationships among language, culture, and society.
804. **SEMINAR IN ANTHROPOLOGY**

Archaeology and Physical Anthropology (ANT)

204. THE RACES OF MAN.

A study of the development of modern man into races through the sub-species specialization of *Homo Sapiens* in the late Pleistocene and Holocene geological times. Human racial hybridism will receive considerable attention in critical word areas where new blended types of man have developed.

401. ARCHAEOLOGY OF THE SOUTHEASTERN UNITED STATES. Prereq: Anthropology 421.

A detailed study of the literature dealing with the archaeology of the Mississippi River basin and contiguous areas in the central United States, the Northeastern and Southeastern woodlands, with particular reference to the description of archaeological remains in the American Southeast and the Caribbean region.

403. HUMAN ORIGINS. Prereq: Zoo. 101-102 or equivalent.

A study of the fossil history of mankind—Pleistocene to recent geological periods.

420. FIELD AND LABORATORY METHODS IN ARCHAEOLOGY. Prereq: Anthropology 421.

Methods of archaeological reconnaissance, survey excavation, laboratory preparation and analysis of collected materials; study to be pursued in scheduled field expeditions to assigned archaeological sites in Georgia.

421. NORTH AMERICAN ARCHAEOLOGY. Prereq: Anthropology 102 and a course from Gly., Ggy. or Hist.

An introductory course in the archaeology of North America. Will survey the total range of North American prehistory from 10,000 B.C. to the 17th century A.D., tracing development in each of the major culture areas from the early hunting gathering stage to the culture peaks just before intensive white contact. Special emphasis will be placed on the mechanics of cultural change as discernible by the methods of prehistory.

425. OLD WORLD ARCHAEOLOGY. Prereq: Anthropology 421.

The development of culture, beginning with the oldest remains of the Stone Age, extending through the Stone, Bronze, and Iron Ages.

801, RESEARCH IN SOUTHEASTERN ARCHAEOLOGY

802.

JOINT-LISTED COURSES OF OTHER DEPARTMENTS

293. FAMILY RELATIONS. (See Home Economics 293)

373. SOCIAL PSYCHOLOGY. (See Psychology 373)

440. SOCIAL PSYCHOLOGY: ATTITUDE MEASUREMENT. (See Psychology 440)

Spanish (SP)

(See Romance Languages)

Speech (SPC) and Drama (DRA)

(*Fine Arts Building*)

Head: Ballew. Staff: Ainsworth, Beasley, Camp, Freshley, Hayes, Head, Houseman, Kahan, Rea, Schommer, Smith, Stell, Torsley, Waal, Westbrook.

GENERAL SPEECH

108. FUNDAMENTALS OF SPEECH.

A first course in the fundamental principles of effective oral communication; special attention is given to the selection and organization of materials, the presentation of speeches, and the development of an acceptable speaking voice.

109. BUSINESS AND PROFESSIONAL SPEECH.

Analysis of various speaking situations, particularly oral reports, interviews and conferences. Study of the factors determining group productivity and problem solving.

110. SPEECH FOR FOREIGN STUDENTS.

Special laboratory course for students learning English as a second language. Intensive study and drill in American English pronunciation and listening comprehension. Required course for all foreign students who fail to pass screening examination in oral English.

209. PHONETICS. Prereq: Speech 108.

A study of the production of the sounds of English and their relation to voice and diction improvement.

H-218. ORAL COMMUNICATION AS A LIBERAL ART.

The evaluation of rhetorical theory, including the classical canons of invention, disposition, style, and delivery as applied to contemporary public address.

250. PUBLIC SPEAKING. Prereq: Speech 108 or Speech 109 or consent of instructor.

A study of the various forms of public address; practice in the preparation and delivery of several types of speeches.

350. ARGUMENTATION AND DEBATE.

Principles of logical proof as applied in argumentation and debate. Theory and practice in analysis, investigation, brief-making, refutation, evidence, forms of argument, fallacies, and debate procedures.

351. PERSUASION. Prereq: Speech 108 or Speech 109 or consent of instructor.

Practical application of the logical and psychological bases of motivation used in oral communication.

412. PHYSIOLOGICAL BASIS OF SPEECH. Prereq: Speech 209.

A study of the anatomy and physiology of breathing, phonation, resonance, and articulation for speech; a study of the physical phenomena in voice and speech. Advanced practice in transcribing variations of speech into phonetic symbols.

450. CLASSICAL RHETORIC. Prereq: Two senior division courses in English, classics or speech-drama.

A study of the development of classical rhetoric in the Greek and Roman periods: Plato to Quintillian.

453. **AMERICAN PUBLIC ADDRESS.** Prereq: Two senior division courses in speech, history or political science.
A study of the history and criticism of American public address from Colonial times to the present, including an analysis of speeches and speakers and the political and social issues of the times.
454. **BRITISH PUBLIC ADDRESS.** Prereq: Two senior division courses in speech, political science or history.
A study of the history and criticism of British public address through survey and analysis of the speeches and speakers and the political and social issues of the time.
455. **RHETORICAL COMPOSITION AND CRITICISM.** Prereq: Two senior division courses in speech or English.
An advanced course dealing with the study of speech styles and models. Emphasis on rhetorical devices and speech criticism. Form and structure of speech from Aristotle to the present.
456. **GROUP DISCUSSION AND CONFERENCE LEADERSHIP.** Prereq: Two senior division courses in speech or business administration or education or consent of instructor.
A study of the theory and techniques of group discussion with emphasis on current experimentation and research. Conference planning and participation and conference leadership techniques are included.
466. **PSYCHOLOGY OF SPEECH (Psychology).** Prereq: Speech 108, Psychology 101 and two senior division courses in speech, classics or English.
A study of speech as a psychological phenomenon with consideration of the use of symbols, the speech personality, emotional reactions and higher mental processes in speech, and psychological studies of language and vocal and visual symbolism.
478. **ORAL INTERPRETATION OF DRAMATIC LITERATURE.** Prereq: Ten hours senior division courses in English, education or speech-drama.
A study of the theory, techniques, and principles of interpretation of drama from the points of view of the oral interpreter and actor. Development of oral skills through the study of selected plays and monologues.
486. **ORAL INTERPRETATION OF PROSE AND POETRY.** Prereq: Ten hours senior division courses in English, education or speech-drama.
A study of the techniques of literary analysis for effective oral reading of lyric and narrative literature and the development of vocal flexibility through a variety of problems in phrasing and emphasis.
550. **TEACHING OF DEBATE.** Prereq: Consent of Instructor.
Principles of argumentation and debate with emphasis on administration of the secondary school debate program.
551. **SEMINAR IN QUANTITATIVE RESEARCH IN SPEECH.** Prereq: Statistics 200 and two senior division courses in speech, education, sociology, psychology or consent of instructor.
Analysis of studies, design and execution of projects in persuasion.
851. **INTRODUCTION TO GRADUATE STUDY IN SPEECH**

DRAMA

102. **ACTING.** Lecture-laboratory course.
The fundamentals of acting techniques, including pantomime and improvisations. Class lectures, exercises, and reports. Individual and group assignments of various acting techniques and procedures. Each student is required to participate in the production of the Laboratory Theatre.
203. **ADVANCED ACTING.** Lecture-laboratory course. Prereq: Drama 102 or consent of instructor.
Continuation of exercises in acting techniques and procedures. Particular emphasis on characterization, line interpretation, and tempo. Each student is required to participate in the productions of the Laboratory Theatre.
222. **SURVEY OF THEATRE HISTORY.**
Comprehensive survey and general approach to the history of drama and theatre, providing the basis for the appreciation of drama as a fine art. Lectures, reading of plays, and student reports.
300. **INTRODUCTION TO WORLD DRAMA AND THEATRE.** (*Alternate elective for Fine Arts 300*).
The nature of dramatic art in terms of the relation between the actor and his role, and between the actor and the spectator, including lectures and discussions of world classics from Sophocles through Brecht and Albee.
334. **STAGECRAFT: SCENE BUILDING AND PAINTING.** Lecture-laboratory course.
An introduction course in the arts of the theatre with emphasis on planning stage settings. Drafting laboratory and assignment to University Theatre and Laboratory Theatre crews.
400. **PLAYWRITING.** Prereq: Two senior division courses in English or classics, or journalism or drama.
Elementary laboratory course in playwriting, including study and practice in writing for stage.
420. **HISTORY OF THE THEATRE.** Prereq: Two senior division courses in English or classics or drama.
The development of the physical theatre and the growth of drama studied from the beginning of dramatic literature of Greece through Shakespeare. Representative dramatics of each period and their important contributions to dramatic literature are included.
421. **HISTORY OF THE THEATRE.** Prereq: Two senior division courses in English or classics or drama.
The development of the physical theatre and written drama studied from the Elizabethan period to Ibsen. Representative dramatics of each period and their important contributions to dramatic literature are included.
422. **DEVELOPMENT OF REALISM IN MODERN DRAMA AND LITERATURE (COMPARATIVE LITERATURE).** Prereq: Two senior division courses in English, speech, drama, classics, modern foreign language, or comparative literature.

The rise and development of realism in the 19th Century with emphasis on the major realistic plays of the period.

429. **PLAY ANALYSIS.**

An intensive examination of selected plays and a study of the problems of plot, characterization, and dialogue as they relate to theatre production.

511. **THEATRE MANAGEMENT.** Prereq: Two senior division courses in drama. A critical examination of theatre management. A survey of the organization of various non-professional theatres and promotional and managerial procedures.

531. **TECHNICAL PROBLEMS.** Prereq: Two senior division courses in drama. Advanced study of the theory and styles of design (lighting, setting, costuming) in the theatre with special emphasis on the techniques of collaboration between director and technical director.

535. **SCENE DESIGN.** Prereq: Two senior division courses in art or drama or courses in advanced drafting or drawing. Lecture-laboratory course. The principles and techniques of scene design and scene painting. Development of floor plans, sketches and scaled models. Suggested elective for majors in the visual arts.

536. **STAGE LIGHTING.** Lecture-laboratory course. Study of problems of lighting in the theatre; lighting instruments, lighting control; operation of lighting equipment. Practical assignments in the University Theatre and Laboratory.

560. **PLAY DIRECTING.**

A survey of the theory and practice of play directing in the modern theatre. It deals with the general philosophy of theatre, analysis of plays for production, play selection, and play casting. Each student makes a director's study of a specific play.

561. **PLAY DIRECTING LABORATORY.**

The production of plays in the Laboratory Theatre with students in the course serving as directors for the productions. Each student will direct a one-act play during the quarter and submit a detailed director's prompt script of the production.

562. **ADVANCED PLAY DIRECTION.** Prereq: Two senior division courses in drama.

Lectures, reports, and reading in contemporary drama and theatre, with particular emphasis on contemporary techniques of staging and direction.

801. **SEMINAR IN MODERN DRAMA AND THEATRE**

802. **SEMINAR IN MODERN DRAMA AND THEATRE**

821. (COMPARATIVE LITERATURE) **THE PLAYS OF HENRIK IBSEN**

822. (COMPARATIVE LITERATURE) **THE PLAYS OF AUGUST STRINDBERG**

900. **RESEARCH SEMINAR AND SPECIAL PROBLEMS IN SPEECH OR DRAMA**

901. **RESEARCH SEMINAR AND SPECIAL PROBLEMS IN SPEECH OR DRAMA**

RADIO AND TELEVISION

544. RADIO AND TELEVISION ACTING. Prereq: Two senior division courses in speech, drama or radio-television.
A theoretical and practical study of television and theatre acting with emphasis on adopting the principles of acting to the television medium.
545. DIRECTING THE RADIO AND TELEVISION DRAMA. Prereq: Two senior division courses in speech and drama, or radio-television. A theoretical and practical study of television and theatre directing with emphasis on adopting the principles of theatre directing to the television medium.
546. ADVANCED PROJECTS IN RADIO AND TELEVISION DRAMA. Prereq: Two senior division courses in speech, drama, or radio-television.
A detailed study of the nature of television and the nature of theatre involving the direction of scenes for television production and the direction of a 30 minute dramatic production.
582. (JOURNALISM) RADIO-TELEVISION PROGRAMMING. Prereq: Journalism 580.
A study of programming with special emphasis on public service and the social aspects of radio and television. An examination of Peabody entries and winners.
583. (JOURNALISM) RADIO-TELEVISION PERFORMANCE. Prereq: Journalism 580.
A laboratory course wherein the student gets actual experience, under faculty supervision, in various aspects of broadcasting and telecasting. On-the-job experience will be supplemented by seminars and regular conferences with instructors.
585. (JOURNALISM) TELEVISION.
An introductory course concerned with the history, problems, and techniques of television. Theoretical instruction is supplemented by laboratory observation and work in nearby television stations.

SPEECH-DRAMA EDUCATION

530. PLAY PRODUCTION FOR THE HIGH SCHOOL TEACHER. Prereq: Two senior division courses in English, speech-drama or secondary education.
Techniques and methods for meeting problems of play selection and play production in the secondary schools. Suggested elective for teachers of English in high schools.
591. TEACHING OF SPEECH AND DRAMA. Prereq: Two senior division courses in speech or drama or secondary education.
Philosophy, methods, and problems of teaching speech and drama in elementary and secondary schools. Emphasizes the analysis of speech needs of children and techniques in implementing speech and drama activities for general speech improvement.
592. CREATIVE DRAMATICS FOR CHILDREN. Prereq: Two senior division courses in speech or drama or elementary education.
A thorough study of theories, principles, and techniques in original dramatiza-

tion for children. Preparation for students who wish to do creative work in drama with children.

593. **SPEECH FOR THE ELEMENTARY SCHOOL.** Prereq: Two senior division courses in speech and drama and/or elementary education.
A study of the various speech activities for elementary school children. Voice and diction for the elementary teacher's speech improvement.

SPEECH CORRECTION

310. SURVEY OF SPEECH PROBLEMS.

The introductory course for those majoring in speech correction. Acts as a course for the classroom teacher who wishes to become informed about speech problems and as a course for students majoring in speech-drama. A study of the major etiology, and basic therapy for all types of speech defects, with a concentration on those most commonly found in the classroom.

470. DIAGNOSIS IN SPEECH CORRECTION. Prereq: Speech 310 and Speech 412.

The theory, administration, and interpretation of tests and diagnostic procedures used in determining the nature, etiology of and therapy for speech defects. In addition to various methods for analyzing speech, attention is given to non-audiometric evaluation of hearing; examination of speech mechanism, special abilities related to speech, and to an understanding of how results of psychological tests are related to speech problems.

471. INTRODUCTION TO EVALUATION OF HEARING LOSS. Prereq: Speech 412.

The anatomy and basic psychophysics of hearing, the pathologies causing hearing loss, and basis theory of hearing evaluations. A survey of educational, psychological and medical rehabilitation for persons with a loss. Practice in pure tone audiometry.

474. (EDUCATION) ARTICULATORY DISORDERS OF SPEECH. Prereq: Speech 470 or consent of instructor.

A study of etiology and the rationale and methods of therapy for functional and organic disorders of voice and articulation. The development of a therapeutic program and lesson plans. Supervised clinical practice in voice and articulation disorders with individuals and groups.

476. (EDUCATION) STUTTERING: ETIOLOGY AND THERAPY. Prereq: Speech 470.

A study of the major theories of causation of stuttering, whether based on neurophysiological, emotional, or learning factors. The development of an integrated therapy based on modern research in stuttering. Supervised clinical practice in individual and group therapy for stutterers.

537. (EDUCATION) SEMINAR IN SPEECH PATHOLOGY. Prereq: Six courses in speech correction or four courses and the consent of the instructor.

Intensive and thorough exploration of the research and theory in one or more areas of speech pathology. Specific content in any one quarter will be adapted to the particular needs of the students. Group projects may be carried in addition to readings and lectures.

575. (EDUCATION) DIRECTED INDIVIDUAL STUDY IN SPEECH CORRECTION. Prereq: Four courses in correction or consent of instructor. This course is designed to permit adaption of the speech correction curriculum to the individual needs of mature students. A detailed outline of requirements must be prepared in conference by the student and instructor and approved by the Chairman of the Speech Correction Area, DEEC, and the Head of the Department of Speech and Drama.
576. (EDUCATION) DIRECTED INDIVIDUAL STUDY IN SPEECH CORRECTION. Prereq: Four courses in speech correction or consent of instructor. Outline of work must be approved in the same manner as for Speech or (Education) 535, but content must be different.
835. (EDUCATION) ORGANIC DISORDERS OF SPEECH
836. (PSYCHOLOGY) ANATOMY AND PSYCHOPHYSICS FOR SPEECH CORRECTION

Statistics (SAT)

(Lumpkin House)

Head: Kossack. Staff: Anderson, Bargmann, Carmon, Clutter, Cohen, Fortson, Kennedy, Kethley, McConnell, Morris, Patel, Sheehan, Shenton.

Undergraduate students interested in statistics may major in mathematics and include a concentration in statistics as part of their major program. Graduate students who are candidates for the Master of Science in Statistics degree may select a Computer Science option under this degree program.

200. ELEMENTARY STATISTICS. Prereq: Mathematics 100.
A basic elementary course in statistics at a level which does not require a knowledge of calculus.
351. INTRODUCTION TO STATISTICAL DECISION THEORY. Prereq: Mathematics 255.
An introduction to statistics as the science of decision making under uncertainty including Bayesian strategies, testing hypotheses, estimation and confidence intervals.
421. STATISTICAL METHODS I. Prereq: Mathematics 100, and two senior division courses.
A first course in statistics for advanced undergraduates and beginning graduate students. Knowledge of calculus is not required. Basic concepts of statistical models, sampling, variability in sample date, distributions, estimation of parameters, simple tests of significance, t-tests, analysis of variance, chi-square tests and simple regression and correlation are studied.
422. STATISTICAL METHODS II. Prereq: Statistics 421.
Analysis of variance with multiple classification, covariance, multiple regression, elements of experimental design, sample survey techniques.
424. SAMPLING AND SURVEY METHODS. Prereq: Statistics 422.
The design of sample survey, biases, variances and cost of estimators. Com-

parison of simple random sampling, ratio estimation, stratification, multi-stage, etc.

425. MULTIVARIATE METHODS. Prereq: Statistics 422.
Multivariate tests of hypothesis, confidence regions, multivariate analysis of variance, discriminatory analysis, factor analysis, correlation.
426. BIOSTATISTICAL METHODS. Prereq: Statistics 422.
Probit analysis, parallel line and slope-ratio assay, statistical designs applicable to bio assay, epidemiological methods, life tables.
451. STATISTICAL THEORY I. Prereq: Mathematics 255 and an introductory course in Statistics.
An introductory course in Statistical Theory.
452. STATISTICAL THEORY II. Prereq: Statistics 451.
Continuation of 451.
500. PROGRAMMING FOR ELECTRONIC DIGITAL COMPUTERS. Prereq: Mathematics 100.
This course is intended to prepare students to use the electronic computer of the University of Georgia Computing Center for tran type programming.
501. SPECIAL PROBLEMS IN COMPUTER SCIENCE. 1-10 hours. Prereq: Two senior division courses in mathematics or statistics or consent of instructor.
Special problems in the theory, and utilization of computers.
502. NUMERICAL METHODS FOR DIGITAL COMPUTERS. Prereq: Mathematics 255, Statistics 501, and consent of instructor.
An introduction to numerical methods applicable to digital computers.
503. COMMERCIAL DATA PROCESSING. Prereq: Mathematics 235.
Programming electronic digital computers for commercial and business applications using the COBOL language.
824. SAMPLING AND SURVEY THEORY
826. LINEAR STATISTICAL ANALYSIS
827. EXPERIMENTAL DESIGN
828. STATISTICAL GENETICS
829. ADVANCED EXPERIMENTAL DESIGN
830. MULTIVARIATE ANALYSIS THEORY
853. MATHEMATICAL STATISTICS I
854. MATHEMATICAL STATISTICS II
855. THEORY OF NONPARAMETRIC STATISTICS
856. STATISTICAL DISTRIBUTION THEORY
867. BIOMATHEMATICS
870. STOCHASTIC PROCESSES
890. ADVANCED PROBLEMS IN STATISTICS
891. STATISTICAL SEMINAR
930. THESIS IN STATISTICS

STATISTICS COURSES AVAILABLE IN OTHER DEPARTMENTS

- Econ. 312 — ELEMENTARY ECONOMIC STATISTICS
Math. 403 — NUMERICAL ANALYSIS I
Math. 404 — NUMERICAL ANALYSIS II
Math. 470 — THEORY OF PROBABILITY
Math. 556 — FUNDAMENTALS OF PROBABILITY AND STATISTICS
Econ. 591 — APPLIED ECONOMIC STATISTICS
Educ. 811 — STATISTICAL METHODS IN EDUCATION
Educ. 812 — ADVANCED STATISTICS IN EDUCATION AND
PSYCHOLOGY
Educ. 813 — RESEARCH DESIGN IN EDUCATION
Econ. 891 — RESEARCH IN APPLIED ECONOMIC STATISTICS
Econ. 892 — TIME SERIES ANALYSIS

Zoology (ZOO)

(Biological Sciences Building)

Head: Cosgrove. Staff: Auerbach, Beyers, Byrd, Coward, Dahlberg, Golley, Hinton, Kenyon, Kent, Kerr, Lindsay, McGhee, Nuttycombe, Odum, Pomeroy, Provost, Reid, Ritter, Scott, Taylor, Thomas, Wiegert.

No student will be allowed to take a senior division course in zoology unless he has a minimum grade of C or above in all prerequisite courses.

212. HUMAN ANATOMY. Three lectures and two double laboratory periods. Prereq: Biology 101-102 and a major in physical education, education, or nursing.
Systematic study of human anatomy.
213. HUMAN PHYSIOLOGY. Three lectures and two double laboratory periods. Prereq: Biology 101-102, Chemistry 121-122 and a major in physical education, education, or nursing.
Systematic study of the physiology of the human body.
225. INVERTEBRATE ZOOLOGY. Three lectures and two double laboratory periods. Prereq: Biology 102.
A survey of the invertebrate animals, their biology, structure, and relations to other animals.
226. VERTEBRATE ZOOLOGY. Three lectures and two double laboratory periods. Prereq: Biology 102.
A study of the structure, body functions, interrelations, and natural history of the vertebrate animals.
350. NATURAL HISTORY OF VERTEBRATES. Three lectures and two triple laboratory periods. Prereq: Zoology 226.
An introduction to local vertebrate fauna with emphasis on behavior, life history, ecology and systematics.

356. **COMPARATIVE ANATOMY OF THE VERTEBRATES.** Two lectures and two triple laboratory periods. Prereq: Zoology 226.
The evolution of vertebrate organ systems.
357. **ANIMAL HISTOLOGY.** Three lectures and two double laboratory periods. Prereq: Zoology 225 and 226.
A study of the tissues and their organization into organs and organ systems in animals.
361. **HISTOLOGICAL TECHNIQUE.** Five double laboratory periods. Open to majors in zoology only.
A course offering training in the preparation of histological material, including practice in fixing, sectioning, staining, and mounting.
372. **PARASITOLOGY.** Three lectures and two double laboratory periods. Prereq: Zoology 225 and 226.
A comparative study of internal parasites of man and the lower animals.
381. **ORNITHOLOGY.** Two lectures and three double laboratory periods. Prereq: Zoology 226.
An introduction to the study of birds, emphasizing the identification, classification, life histories, and behavior of Georgia species.
399. **INDEPENDENT STUDY.** One to five hours per quarter, maximum of 15 hours. Prereq: 10 hours of senior division work in biological science and approval of department head.
Affords advanced students the opportunity to conduct independent research under direction of individual staff members.
400. **ENERGETICS AND ECOSYSTEMS.** Three hours. Prereq: Biology 302 and one other senior division course in biological science.
A series of lectures exploring the principles of energetics as applied to the study of ecological systems.
401. **ADVANCED GENETICS.** Prereq: Biology 300, 301 and 302.
The experimental bases of modern genetic theory with emphasis on chromosome mechanics.
402. **PROTOZOOLOGY.** Three lectures and two double laboratory periods. Prereq: Two senior division courses in biology.
A study of the phylum Protozoa with emphasis on the morphology, taxonomy, life history and the parasitic forms and with consideration of the origins, ecology and genetics of free-living and parasitic organisms.
403. **MAMMALOLOGY.** Three lectures and two double laboratory periods. Prereq: Two senior division courses in zoology.
A study of the taxonomy, distribution, ecology, and evolution of mammals with special emphasis on land mammals of the Southeast.
404. **HERPETOLOGY.** Three lectures and two double laboratory periods. Prereq: Two senior division courses in zoology.
An introduction to the taxonomy, distribution, ecology, behavior, and evolution of amphibians and reptiles, with special emphasis on those of the Southeast.
405. **ICHTHYOLOGY.** Three lectures and two double laboratory periods. Prereq: Zoology 356 and one other senior division course in zoology.

A study of the taxonomy, distribution, ecology, and evolution of fishes with special reference to the marine and freshwater fishes of eastern North America.

- 410. EVOLUTION. Prereq: Biology 300, 301 and 302.
Evolutionary concepts and mechanisms, including the origins of life, variation and species.
- 422. COMPARATIVE PHYSIOLOGY (METABOLIC SYSTEMS). Three lectures and two double laboratory periods. Prereq: Biology 300, 301 and 302.
Physiology of nutrition, respiration and metabolism, circulation and excretion in animals.
- 429. ENDOCRINOLOGY. Three lectures and two double laboratory periods. Prereq: Biology 300, 301 and 302. Offered alternate years including 1967-68.
Physiology of the endocrine glands, their control of metabolism and reproductive cycles.
- 480. ANALYSIS OF DEVELOPMENT. Two lectures and two triple laboratory periods. Prereq: two senior division zoology courses.
Students will learn techniques and conduct short researches into problems in developmental biology.
- 801. PARASITIC PROTOZOA
- 803. HELMINTHOLOGY
- 807. ADVANCED INVERTEBRATE ZOOLOGY
- 808. ADVANCED INVERTEBRATE ZOOLOGY
- 810. LIMNOLOGY AND OCEANOGRAPHY
- 811. MARINE BIOLOGY
- 812. FRESH WATER BIOLOGY
- 813. HYDROBIOLOGY SEMINAR
- 819. PHYSIOLOGY SEMINAR
- 820. CELLULAR PHYSIOLOGY
- 826. COMPARATIVE PHYSIOLOGY (BEHAVIORAL SYSTEMS)
- 827. VERTEBRATE PHYSIOLOGY
- 830. SEMINAR IN PARASITOLOGY
- 854. PHYSIOLOGICAL ECOLOGY
- 855. ADVANCED ECOLOGY
- 856. ECOLOGY SEMINAR
- 870. GENETICS SEMINAR
- 880. SEMINAR IN DEVELOPMENTAL BIOLOGY
- 890. SEMINAR IN VERTEBRATE ZOOLOGY
- 900. PROBLEMS IN ZOOLOGY

College of Business Administration

Accounting (ACC)

Head: Yeargan. Staff: Bergold, Davis, Edwards, Fields, Homick, Mecimore, Mullen, Page, Scott, Seago, Tummins, Waters, Willis.

110. PRINCIPLES OF ACCOUNTING, first course.

An introduction to the fundamentals, practices, and procedures of accounting. Financial statement construction.

111. PRINCIPLES OF ACCOUNTING, second course. Prereq: Accounting 110.

Accounting principles and basic accounting theories as an aid to management. Cost accounting fundamentals. Analysis and interpretation of financial statements.

H112. (110). PRINCIPLES OF ACCOUNTING, (HONORS), first course. (Not open to students with credit for Accounting 110).

A study of the underlying concepts of accounting which properly serve as a language of communication concerning financial facts of an enterprise with a view to analysis, control, and planning of enterprise operations.

H113. (111). PRINCIPLES OF ACCOUNTING, (HONORS), second course. (Not open to students with credit for Accounting 111).

A continuation of H112.

215. (MANAGEMENT). AUTOMATIC DATA PROCESSING.

The application of punched card and electronic equipment to business data processing problems. Instructions are in the operation of punched card equipment as well as a study of business systems and procedures utilizing punched card equipment.

316. (MANAGEMENT). INTRODUCTION TO BUSINESS DATA PROCESSING SYSTEMS. Prereq: Accounting 111.

(1) Introduction to Electronic Data Processing, (2) processible data, (3) Electronic Data Processing equipment (input and output), (4) programming and processing procedures, (5) systems analysis, (6) approaches to systems designs, (7) flow charts, etc., (8) implementation.

340. (BUSINESS). BUSINESS PRACTICE. See Business 340.

353. INTERMEDIATE ACCOUNTING, first course. Prereq: Accounting 111 and grades of at least C in Acc. 110 and Acc. 111.

The development of accounting theories; importance of theories and their importance in determining accounting principles, practices, and conventions. Basic accounting theories are applied to the problems incident to partnership and corporation formation, operation, and liquidation. Theories determining valuation of current assets and their position on financial statements are stressed.

354. INTERMEDIATE ACCOUNTING, second course. Prereq: Accounting 353.

A continuation of Accounting 353 with emphasis on the valuation of fixed assets and liability accounts. The application of the theories of valuation of current assets and their position on financial statements are stressed.

355. **MANAGEMENT ACCOUNTING.** Prereq: Accounting 111. (Not open to accounting majors.)
The uses of accounting data by management in planning, budgeting, and forecasting.
356. **CURRENT ACCOUNTING THEORY AND RESEARCH.** Prereq: Accounting 514.
A study of current accounting problems with special emphasis on the publications and pronouncement of professional organizations. Students will explore specific controversial topics and write research papers.
449. **ANALYSIS OF FINANCIAL STATEMENTS.** Prereq: Accounting 111. (Not open to students with more than 15 hours credit in accounting.)
Techniques of analysis of balance sheets and income statements and the interpretation of findings; statements of various industries and utilities with interpretations based upon a knowledge of the particular industry.
514. **COST ACCOUNTING.** Prereq: Accounting 354.
Basic accounting principles and practices. Job and process costs systems and standards.
515. **INCOME TAXATION.** Prereq: Accounting 111.
Federal income tax law applicable to individuals. Tax determination practices and tax planning within the tax law provisions.
516. **ADVANCED COST ACCOUNTING.** Prereq: Accounting 514.
Cost accounting; a continuation of Accounting 514 with emphasis on distribution cost systems of business operations.
517. **C. P. A. REVIEW.** Prereq: Accounting 515, 556 and 572.
General review of all accounting courses preparatory to the state C. P. A. examinations. Open only to students planning to take the C.P.A. examinations.
518. **GOVERNMENTAL ACCOUNTING.** Prereq: Accounting 354.
Accounting problems and procedures pertaining to state and local governments and their institutions; governmental classification of receipts and expenditures; preparation of reports; budgeting and operation and fund accounts.
519. **TAX ACCOUNTING.** Prereq: Accounting 515.
Continuation of Accounting 515 with emphasis upon corporation income tax laws, social security taxes, and estate taxes.
521. **(MANAGEMENT). INTRODUCTION TO PROGRAMMING SYSTEMS.** Prereq: Accounting 316 or equivalent.
To develop an understanding of and an appreciation for the tools of data processing—their operation and application.
550. **(MANAGEMENT). SYSTEMS ANALYSIS AND DESIGN.** See Management 550.
551. **(MANAGEMENT). MANAGING BUSINESS DATA PROCESSING SYSTEMS.** See Management 551.
556. **ACCOUNTING PROBLEMS.** Prereq: Accounting 354.
Application of accounting theory to specialized problems of industry, such as consignments, insurance, receivership and estates; application of funds.

557. **CONSOLIDATED STATEMENTS.** Prereq: Accounting 354.
Development of special accounting problems incident to corporate organizations in the preparation of consolidated statements, consolidations, and mergers.
572. **AUDITING PRINCIPLES.** Prereq: Accounting 354.
Principles governing audits and audit procedures; qualifications and responsibilities of the auditor.
573. **AUDITING PROBLEMS.** Prereq: Accounting 572.
Application of auditing theories and principles to audit problems with emphasis upon preparation of audit working papers and reports.
579. **FUNCTIONS OF THE CONTROLLER.** Prereq: Accounting 514; or Accounting 355 and consent of instructor. (Not open to students with credit in Accounting 516.)
Principles and functions of the controller and his office; forecasting; budget preparation; variances and allocation of responsibility; application of principles of management psychology to remedying weaknesses.
The following courses are open only to graduate students. For detailed course descriptions, see the Graduate School Bulletin.
854. **ACCOUNTING THEORY**
855. **MANAGEMENT ACCOUNTING SEMINAR**
856. **ADVANCED COST AND CONTROLLERSHIP**
857. **ADVANCED AUDITING**
858. **ADVANCED ACCOUNTING PROBLEMS**
859. **TAX PLANNING AND RESEARCH**
881. **ACCOUNTING SYSTEMS**

Banking and Finance (FIN)

Head: Dince. Staff: Black, Bonin, Bunting, Clement, Drewry, Escarraz, Floyd, Ford, Hanna, Kahl, Masten, McTeer, Stansell, Timberlake, Totton, and Waller.

326. (Economics). **MONEY AND BANKING.** Prereq: Economics 106 or permission of instructor.
Money in the economic organization; monetary theory; methods of stabilizing the price level; theories of bank deposits; discount policy and the interest rate of central banks regulation of credit.
- H336. (326) (Economics). **MONEY AND BANKING.** (Honors). Not open to students with credit in Finance 326.
Money in the economic organization; monetary theory; methods of stabilizing the price level; theories of bank deposits; discount policy and the interest rate of central banks regulation of credit.
330. **BUSINESS FINANCE.** Prereq: Accounting 111.
Financial promotion and organization of the business firm; problems of financial administration; failures; financial rehabilitations.
- H337. (330). **BUSINESS FINANCE.** (Honors). Prereq: Accounting 111. Not open to students with credit in Finance 330.
This course is designed to acquaint the student with the analytical tools of

finance. The honors course emphasizes analysis as opposed to description. More particularly, the course will emphasize the recent literature on the theory of capital usage by the business firm.

340. (Business). BUSINESS PRACTICE. See Business 340.
430. CORPORATE FINANCIAL POLICY. Prereq: Finance 330.
Analysis of financial problems and policies of corporations.
431. INVESTMENTS. Prereq: Finance 326.
Elements of an "ideal" investment; examination and testing of specific investment securities.
432. INVESTMENT MANAGEMENT. Prereq: Finance 330 and Finance 326.
Permission of the instructor.
Considers alternative basic approaches to management of common stock and fixed-income security portfolios. Extensive use is made of investment management cases in specific areas. These include personal trusts, pension funds, endowment funds, insurance companies, and individual accounts. Problems and readings are also assigned.
434. (Economics). PUBLIC FINANCE.
A general consideration of American public expenditures, revenues, and fiscal administration.
435. (Economics). STATE AND LOCAL PUBLIC FINANCE.
Revenues, expenditures, and fiscal administration of Georgia and its political subdivisions; fiscal comparisons of Georgia with other states; and an analysis of intergovernmental tax relationships.
439. FINANCIAL PLANNING AND CONTROL. Prereq: Finance 430, or equivalent, or permission of instructor.
A survey of theory and procedures involved in the development and operation of financial plans and financial control to aid in the administration of commercial and industrial enterprises.
450. (Economics). MONETARY POLICY. Prereq: Finance 326.
Monetary theory and how it affects monetary policy; objectives; techniques, and problems involved; Treasury fiscal and debt management policies as they affect and are affected by Federal Reserve policy.
451. COMMERCIAL BANKING. Prereq: Finance 326.
The theory of commercial banking and its effect on the supply of money and national income; the concept of bank asset management; the relationship of asset management to liquidity; commercial banking and the nation's credit structure.
452. THE AMERICAN FINANCIAL SYSTEM. Prereq: Finance 326.
The function, role, and management of the major types of financial institutions in the United States. Particular attention is paid to the flow of funds through the specialized financial market sectors.
469. (Economics). NATIONAL INCOME ACCOUNTING. Prereq: Finance 326.
469. (Economics). INTERNATIONAL FINANCE: THEORY AND POLICY.
See Economics 481.

488. **SECURITY ANALYSIS.** Prereq: Finance 330 or permission of instructor.
The tools of security analysis are developed and applied to improve critical judgment in the appraisal and selection of securities.
510. (Real Estate). **REAL ESTATE FINANCE.** See Real Estate 510.
512. (Real Estate). **BUSINESS REAL ESTATE ANALYSIS.** See Real Estate 512.
533. **CREDIT MANAGEMENT.** Prereq: Finance 330.
An analysis of the principles underlying the extension of credit to finance the transfer of goods and services.
The following courses are open only to graduate students. For detailed course descriptions, see the Graduate School Bulletin.
830. **BUSINESS FINANCIAL POLICY**
831. **INVESTMENT ANALYSIS**
834. **THEORY OF PUBLIC FINANCE**
835. **SEMINAR IN PUBLIC FINANCE**
850. (Economics). **MONETARY AND BANKING THEORY**
853. (Economics). **DEVELOPMENT OF MONETARY INSTITUTIONS**
951. **FINANCIAL PROBLEMS ANALYSIS**
952. **RESEARCH PROBLEMS IN FINANCE**

Business Administration (BBA)

These courses are normally service offerings and may be taken by students irrespective of their major area of study.

- 101, **ORIENTATION TO BUSINESS.** 2 hours. (One period a week for two
102. quarters.)
Development of the attitudes and skills necessary for success in college; study of the separate specialized areas and their educational and personal requirements. Required of all freshmen in the College of Business Administration. (See Item 1, page 350).
109. **BUSINESS AND PROFESSIONAL SPEECH.**
Speech as a practical, manageable tool; improvement of individual proficiency in oral communication; speech practice in situations similar to those encountered, regularly in business and industry.
340. **BUSINESS PRACTICE.** Maximum credit 15 elective hours. Prereq: Three years of college work leading to a B.B.A. degree.
A few superior students are permitted in their senior year to enter business establishments for the purpose of obtaining practical experience. The period of absence is limited to one quarter.
370. **BUSINESS LAW, first course.**
Contracts, sale contracts, uniform sales law, negotiable instruments, bailments, common and public carriers, and agency.
- H380. (370). **BUSINESS LAW (Honors).** (Not open to students with credit in Business Administration 370).

This course in business law will deal incidentally with substantive law but primarily with the evolution of law through court interpretation and the effect of changing social customs upon these interpretations.

576. BUSINESS LAW, second course.

The second course of business law covers agency and principal, business organizations, insurance, property, wills, and bankruptcy. No attempt is made to cover all the law under these topics, but to use them for the basis of discussion of broad legal problems dealing with business.

The following courses are open only to graduate students. For detailed course descriptions, see the Graduate School Bulletin.

941. BUSINESS IN A DYNAMIC ECONOMY

942. QUANTITATIVE METHODS IN BUSINESS

943. (Economics). WAGE THEORY AND DETERMINATION

945. CONCEPTUAL FOUNDATIONS OF BUSINESS

946. EXECUTIVE CONTROL

950. ETHICS IN BUSINESS PRACTICES

953. BUSINESS POLICY FORMULATION AND ADMINISTRATION

954. BUSINESS POLICY FORMULATION AND ADMINISTRATION II

Economics (ECN)

Staff: Beadles, Cohen, Danielsen, Godfrey, Green, Holshouser, Hutto, Jackson, Jones, Keeling, McDonald, Miller, Morrison, Padget, Schriden, Seagler, Segrest, Tailby, Wood, Wright, and Xander.

Economics 105 and 106 are prerequisites for all other economic courses.

105. PRINCIPLES OF ECONOMICS.

Description and analysis of the economic organization of modern society with a brief introduction to the theory of value and distribution. This course may be taken without Economics 106.

106. PROBLEMS OF ECONOMICS. Prereq: Economics 105.

A further study of economic principles started in Economics 105. Economics 105 and 106 are prereq: to all advanced courses in economics.

H115. (105). PRINCIPLES OF ECONOMICS. (Honors). (Not open to students with credit for Economics 105).

Students will analyze principles underlying economic organization and functioning. Analysis will include introduction to classical, neo-classical, and modern economic theory with added exposure to distribution and value theory.

H116. (106). PROBLEMS OF ECONOMICS. (Honors). (Not open to students with credit for Economics 106).

This course is designed to appraise and evaluate the economics of the firm.

133. ECONOMIC DEVELOPMENT OF THE UNITED STATES.

American economic development from the colonial period to the present; economic factors involved in industrial growth and the resulting economic problems.

134. ECONOMIC DEVELOPMENT OF EUROPE.

Development of the economic aspects of civilization in medieval and modern times; evolution of economic institutions; historical background of present economic problems.

H143. (133). ECONOMIC DEVELOPMENT OF THE UNITED STATES. (Honors). (Not open to students with credit in Economics 133).

American economic development from the colonial period to the present; economic factors involved in industrial growth and the resulting economic problems.

312. ELEMENTARY ECONOMIC STATISTICS.

Introduction to the collection, presentation, and analysis of quantitative economic data; analysis of central tendency, dispersion, statistical inference, index numbers, time series and correlation.

H322. (312). ELEMENTARY ECONOMIC STATISTICS. (Honors). (Not open to students with credit in Economics 312).

This course offers an opportunity for more intensive examination of the theory and application of statistical measures. Inference, including hypothesis testing, is emphasized. Students become familiar with important statistical works and are introduced to such concepts as variance analysis, and multiple and partial correlation.

326. (Finance). MONEY AND BANKING. See Finance 326.

H336. (326). (Finance). MONEY AND BANKING. See Finance H336.

386. LABOR ECONOMICS.

Survey of labor organizations, wages, hours, unemployment, labor legislation, and current developments in labor. Tools of economic analysis are utilized.

H396. (386). LABOR ECONOMICS. (Honors). (Not open to students with credit in Economics 386.)

Survey of labor organization wages, hours, unemployment, labor legislation and current developments in labor.

405. INTERMEDIATE MICRO-ECONOMIC THEORY.

Economic behavior of households and firms, determination of prices and allocation of resources.

406. INTERMEDIATE MACRO-ECONOMIC THEORY

National income accounting and theory. Determination of national income, employment, price level, and growth.

410. ECONOMIC GROWTH AND DEVELOPMENT. Prereq: Two senior division courses in economics.

Problems and programs of economic growth; specific attention to selected underdeveloped areas.

421. PUNCHED-CARD STATISTICS. Prereq: Accounting 315 and an introductory course in statistics.

Use of punch-card machines in the treatment of numerical data; preparation of statistical surveys in a form suitable for machine use in the processing of the data; use of tables in the form of pre-punched cards.

434. (Finance). PUBLIC FINANCE. See Finance 434.

435. (Finance). STATE AND LOCAL PUBLIC FINANCE. See Finance 435.
436. BUSINESS FLUCTUATIONS. Prereq: Economics 312.
Economic and social significance of business fluctuations; causes; methods and theories of forecasting; measures for controlling cycles.
437. COMPARATIVE ECONOMIC SYSTEMS.
Analysis and appraisal of the theories underlying economic systems; proposed and existing schemes with respect to the maintenance of full employment; distribution of income, and encouragement of progress.
444. GOVERNMENT AND BUSINESS.
Economic bases and guidelines for government, intervention; the policy of maintaining competition; role of anti-trust policy in a private enterprise economy; character and limitations of the law; the law emerges, 1890-1911; antitrust law and restrictive agreements; the law and monopoly, the regulation of competitive practice, appraisal of anti-trust.
445. PRIVATE ENTERPRISE AND PUBLIC POLICY.
The structure and performance of American industry; concentration and dispersion in the business structure; the workability of competition in the dispersed industries; dispersed industries; local markets and allegedly inadequate competition; the workability of competition in concentrated industries; implications for public policy.
450. (Finance). MONETARY POLICY. See Finance 450.
469. NATIONAL INCOME ACCOUNTING. Prereq: Finance 326.
Concepts, statistical sources, and uses of the national income and wealth accounts; relationships to input-output and money flow analysis. This course is cross-listed as Finance.
480. INTERNATIONAL TRADE: THEORY AND POLICY.
Theoretical analysis, historical survey and current problems of international trade; an examination of international economic policies and institutions especially as they relate to national political and economic objectives; trade barriers and controls.
481. (Finance). INTERNATIONAL FINANCE: THEORY AND POLICY. Prereq: Finance 326.
Balance of payments analysis, international equilibrium and the mechanism of adjustment, international money markets and monetary standards, capital movements and the objectives of international monetary policy.
489. THE LABOR MOVEMENT. Prereq: Economics 386.
Historical background of modern industrial relations; economic, social and political forces contributing to the current problems in labor economics.
490. (Management). LABOR LEGISLATION. Prereq: Economics 386.
An economic analysis of the problems and issues arising out of the legislative and judicial efforts to define the rights, duties and responsibilities of labor organizations and management in the field of industrial relations.
491. (Management). COLLECTIVE BARGAINING. Prereq: Economics 386.
The collective bargaining process with special reference to economic implications.

493. **INDUSTRIAL RELATIONS SYSTEMS.** Prereq: Economics 386.
The study of the growth, development, and economic import of labor movements in selected countries.
494. **LABOR MARKET ANALYSIS.** Prereq: Economics 386.
A presentation of current theories, recent empirical investigations, and historical and current data source materials in the area of labor supply at the local, state, regional, and national levels. The course will focus upon (1) evaluation of the quality and quantity of the labor resource available to a labor market; (2) application of labor market data by firms and government agencies and (3) the role of the labor resource in explaining the South's regional position in the national economic setting.
495. **ECONOMICS OF POPULATION.**
Economics and social results from population change, particularly with respect to economic opportunities, employment, investment, international trade, and economic development; explanation and forecasting of population trends.
496. **MANAGERIAL ECONOMICS.**
The structure of American industry; classification of markets and industries by competitive structure; demand analysis; price and output decisions; the theory of the firm and economic system; the economics of business and public policies.
497. **ECONOMIC EVOLUTION OF THE UNITED STATES.** Prereq: Economics 133 or permission of the instructor.
Economic evolution of the United States emphasizes use of tools of quantitative and qualitative analysis as applied to American economic evolution.
499. **QUANTITATIVE ANALYSIS FOR ECONOMISTS.** Prereq: Economics 312.
The study of mathematics as a tool for economic analysis. Topics included are (1) application of elementary algebra; (2) difference equations; and (3) selected areas in modern algebra and differential calculus.
545. **CONTEMPORARY ECONOMICS FOR TEACHERS I.**
For public school teachers only. Employment theory. Emphasis is placed upon recent development and varying points of view in contemporary economics. May not be counted as part of an undergraduate degree program.
547. **FINANCE IN THE AMERICAN ECONOMY.** (Off-campus-Atlanta). For school teachers only.
An analysis of the role of finance in supporting the competitive enterprise system. In addition to a description of the money process and techniques of capital information in a free society, various financial institutions are analyzed as to their effectiveness in the best interests of society. Emphasis is placed on methods of including economic information into the secondary school curriculum.
559. (Marketing). **PRINCIPLES OF TRANSPORTATION.** See Marketing 559.
577. **PUBLIC UTILITIES, PUBLIC REGULATION, AND PUBLIC ENTERPRISE.**
Economic and philosophic bases for government regulation and ownership; development characteristics, rights, and duties of regulated industries; problems

of regulation and rates; service; securities; activities of the Federal government in power, transportation, atomic energy and other fields.

591. APPLIED ECONOMIC STATISTICS. Prereq: Economics 312 or Statistics 301.

The application of probability to business decisions, sampling theory and significance testing in economics and business, elementary analysis of variance, and multiple regression and correlation.

The following courses are open only to graduate students. For detailed course descriptions, see the Graduate School Bulletin.

805. ADVANCED ECONOMIC THEORY I
806. ADVANCED ECONOMIC THEORY II
807, 808. THE HISTORY OF ECONOMIC THOUGHT
809. ADVANCED ECONOMIC THEORY III
810. RESEARCH IN ECONOMIC GROWTH I
811. RESEARCH IN ECONOMIC GROWTH II
833. SEMINAR IN MODERN POLITICAL ECONOMY
836. SEMINAR IN BUSINESS CONDITIONS ANALYSIS
844. SEMINAR IN GOVERNMENT AND BUSINESS
850. (Finance). MONETARY AND BANKING THEORY. See Finance 850
853. (Finance). DEVELOPMENT OF MONETARY INSTITUTIONS. See Finance 853
869. MATHEMATICAL ANALYSIS FOR ECONOMICS
870. MATHEMATICAL ECONOMICS I
871. MATHEMATICAL ECONOMICS II
880. SEMINAR IN INTERNATIONAL TRADE
886. PROBLEMS IN INDUSTRIAL RELATIONS
891. RESEARCH IN APPLIED ECONOMIC STATISTICS
893. ECONOMICS SEMINAR
894. SEMINAR IN ECONOMIC HISTORY
912. STATISTICS IN BUSINESS DECISIONS
943. (Business). WAGE THEORY AND DETERMINATION

Management (MAN)

Head: Smith. Staff: Balyeat, Curran, Fasick, Finn, Gates, Goebel, Miley, Sanborn, Scott, Tate, Thrasher, Winburn, and Zoll.

215. (Accounting). AUTOMATIC DATA PROCESSING. See Accounting 215.
316. (Accounting). INTRODUCTION TO BUSINESS DATA PROCESSING SYSTEMS. See Accounting 316.
340. (Business Administration). BUSINESS PRACTICE. See Business Administration 340.

351. PRINCIPLES OF MANAGEMENT.

Fundamentals of staff and operative management; management principles and techniques; application of techniques to specific fields.

352. INDUSTRIAL OPERATIONS. Prereq: Management 351.

The general organization and management of an industrial plant. Process analysis, plant location, plant layout, purchasing, materials handling, quality control, maintenance and production control systems.

H362. (351). PRINCIPLES OF ORGANIZATION AND MANAGEMENT. (Honors). (Not open to students with credit for Management 351.)

Fundamentals of staff and operative management; major emphasis is given to an analysis of the process of management as it involves concepts, behavior and practices; techniques underlying the basic management functions of organizing, planning, directing and controlling are developed and applied, through case analysis.

490. (Economics). LABOR LEGISLATION. See Economics 490.**491. (Economics). COLLECTIVE BARGAINING.** See Economics 491.**521. (Accounting). INTRODUCTION TO PROGRAMMING SYSTEMS.** See Accounting 521.**540. BUSINESS AND SOCIETY.**

Examination of the determinants and content of the socio-political environment within which business enterprise operates. A special emphasis will be given to comparative materials—i.e., culture—institutions interaction outside the United States.

541. MANAGEMENT SCIENCE. Prereq: Permission of instructor.

This course is designed as a first introduction on a semirigorous basis to the possibilities and techniques for solving management problems having quantified or quantifiable parameters.

550. (Accounting). SYSTEM ANALYSIS AND DESIGN. Prereq: Accounting 316, or consent of instructor.

Introduction to general systems theory, its historical development and application. Methods of system analysis including operations analysis, configuration studies, feasibility studies, and trade-off analysis. Phases in development of large-scale man-machine systems.

551. (Accounting). MANAGING BUSINESS DATA PROCESSING SYSTEMS. Prereq: Management 541, or consent of instructor.

Information processing in business (generation of information, processing and use); information economics; information management; management systems; systems design; environment of management systems.

552. INTERNATIONAL BUSINESS POLICY: PRINCIPLES AND CASES. Prereq: Senior standing and consent of instructor.

The history and present conduct of international business operations; systematic discussion of the economic, political, legal, and cultural dimensions of enterprise abroad, and special problems confronting management decision-making in such enterprises.

553. **PRODUCTION PLANNING AND QUALITY CONTROL.** Prereq: Management 352.
Forecasting, planning, and controlling production flow; techniques for planning and controlling quality of produced and purchased items; quantitative methods especially applicable to scheduling and control.
554. **SMALL BUSINESS MANAGEMENT.** Prereq: Senior standing and consent of instructor.
The place of the small business enterprise on the national economic scene, the method of establishing such a venture, the operation of the going small business, and problems confronting the entrepreneur in the small enterprise.
555. **OPERATIONS RESEARCH: CONCEPTS AND APPLICATIONS.** Prereq: Mathematics 235 and Economics 312, or permission of the instructor.
An introduction to the use of operations research techniques in solving business problems and in improving decision-making. Emphasis on concepts, applications, and the role of the computer.
575. **MANAGEMENT OF BUSINESS RESEARCH PROGRAMS.** Prereq: Senior standing.
Organization and financial management of business research programs as enterprises; by size, by function and by relative position in the field.
582. (Psychology). **PERSONNEL MEASUREMENT.** Prereq: Economics 312 or Psychology 200.
A study of quantitative methods applicable to the measurement of personnel and their work behavior in the business setting; methods of evaluating job performance and program effectiveness.
583. **ADVANCED PERSONNEL MEASUREMENT.** Prereq: Management 582.
The application of advanced statistical procedures and experimental design to the study of individual and group behavior. The context of the business organization will be emphasized.
585. **PERSONNEL ADMINISTRATION.** Prereq: Psychology 101 and Economics 386.
The principles and practices in the field of the administration of human relations in industry. Emphasis is given to scientific techniques and devices in the development of a well-rounded personnel program.
586. (Psychology). **PRINCIPLES OF COMPENSATION AND INCENTIVES.** Prereq: Economics 312 or Psychology 200.
A study of job evaluation and other procedures that lead to the development of a sound wage and salary structure; problems of administration, executive compensation, and financial incentives.
587. (Psychology). **WORK AND EFFICIENCY.** Prereq: Economics 312 or Psychology 200.
Human factors in relation to work and equipment design; principles of work measurement.
588. (Psychology). **PERSONNEL SELECTION AND PLACEMENT.** Prereq: Management 582, or permission of instructor.
A study of methods applicable to the development of valid standards of per-

sonnel selection and placement with the use of psychological tests, the personal interview, and other kinds of personal data.

589. **PERSONNEL POLICY AND PRACTICE.** Prereq: Management 585.
An advanced course in personnel administration. An analysis of current practices and developments involving the formulation, implementation, and communication of personnel policies and practices in the business organization.
595. **ADMINISTRATIVE PRACTICES.**
Individual and group behavior in organizations; nature and crucial importance of communications, employee motivations and group dynamics; development of greater effectiveness in the business organization.
596. **ORGANIZATIONAL COMMUNICATION.** rereq: Senior standing.
Analysis of human communication patterns in organizations. Special attention to communication policies, procedures, and practices in administration. Examination of functions, philosophies, methods, and characteristics of management communication.
597. **ORGANIZATION THEORY.** Prereq: Core curriculum.
The functioning of organizations and the factors making for differences in functioning from one organizational situation to another. First stress will be given to research findings about organizational relationships, but the primary focus will be on the consequences of these findings for effective management.
598. **RESEARCH IN ADMINISTRATION.** Prereq: Senior standing and consent of instructor.
A study of research methodology with major emphasis on the function and design of administrative research, techniques of data-gathering and data analysis as well as reporting and utilization of findings.
599. **BUSINESS POLICY.** Prereq: Core curriculum.
Capstone course utilizing all of the major fields in business administration to allow the senior student to apply these skills in situations dealing with the firm as a whole.

The following courses are open only to graduate students. For detailed course descriptions, see the Graduate School Bulletin.

902. **SEMINAR IN PERSONNEL RESEARCH**
903. **PROJECTS IN PERSONNEL RESEARCH**
904. **SEMINAR IN PERSONNEL DEVELOPMENT**
905. **MANAGEMENT INFORMATION SYSTEMS**
906. **DECISION THEORY**
907. **PRODUCTION MANAGEMENT SEMINAR**
908. **PERSONNEL MANAGEMENT SEMINAR**
931. **SEMINAR IN OPERATIONS RESEARCH**
948. **ANALYTICAL METHODS OF MANAGEMENT SCIENCE**

Marketing (MKT)

Head: Eakin. Staff: Barksdale, Carter, George, Gross, Harris, Horton, Long, Rowland, Rucker, Schoenfeldt, Thompson, Tritt, Troelston.

360. **PRINCIPLES OF MARKETING.**
Principles and methods involved in the movement of goods and services from producers to consumers.
340. (Business Administration). **BUSINESS PRACTICE.** See Business Administration 340.
- H369. (360). **PRINCIPLES OF MARKETING.** (Honors). (Not open to students with credit in Marketing 360.)
A study of the basic functions and theories of the field of marketing. A study of the basic functions and theories of the field of marketing. A study of marketing programs through the use of case studies and written reports.
463. (Geography). **GEOGRAPHY OF TRANSPORTATION.** See Geography 463.
465. **MARKETING RESEARCH AND ANALYSIS.** Prereq: Marketing 360.
Scientific method of the construction of several marketing research studies; the solution of specific distribution problems; qualitative market analyses; market trends; data collection, tabulation and interpretation.
487. **COMMODITY MARKETS.** Prereq: Marketing 360.
Development, organization and importance of commodity markets; governmental and international regulations and controls; organization and functions of the exchange.
558. **INTERNATIONAL MARKETING.** Prereq: Marketing 360.
A study of the significance of the international market to the American firm. Emphasis is placed on marketing techniques and methods of expanding participation in the foreign market.
559. **PRINCIPLES OF TRANSPORTATION.** Prereq: Marketing 360.
Study of the principles of transportation with special emphasis on the history and regulation of railroads.
560. **PRINCIPLES OF RETAILING.** Prereq: Marketing 360.
The basic background concepts and analytical tools of the field; physical plant; personnel; inventory; pricing; buying; sales promotion control.
561. (Psychology). **BEHAVIORAL THEORY AND MARKETING.** Prereq: Marketing 360.
The promotional processes are more easily comprehended if the human factors and the psychology of decision formation and action are analyzed. This course deals with the motives, attitudes, and expectations of consumer and businessmen that contribute to the understanding of the marketing process.
562. **RETAIL MERCHANDISING.** Prereq: Marketing 360.
Product buying and selling merchandise inventory management and control; profit analysis, budget planning; organization principles; research in retailing.
563. **ADVERTISING AND DISPLAY.** Prereq: Marketing 360.
Advertising procedures; organization of publicity departments; research media; internal sales promotion; campaigns; display techniques.
564. **SALES MANAGEMENT.** Prereq: Marketing 360.
Problems and cases of manufacturers and dealers in the sale of consumer and industrial goods; selection, training, organizing, and directing salesmen.

565. **RETAIL ADMINISTRATION AND POLICY.** Prereq: Marketing 562.
The development of a management philosophy; analysis and solution of retail problems; integration of retailing functions; development of policies for managing these functions.
566. **ECONOMICS OF MARKETING.** Prereq: Marketing 360.
Economics of the consumer market; the process of consumption position and responsibilities of the consumer; desirable controls of consumption.
567. **MARKETING PROMOTION.** Prereq: Economics 105, 106, Marketing 360.
The major structural components of this course begin with the nature and scope of promotion, proceeds to the motivation barriers and aids to promotional goals, with all promotional and firm activities and finally concludes with the ethical and moral effects of promotion.
568. **MOTOR TRANSPORTATION.** Prereq: Marketing 559.
A study of the significance and development of motor transportation. Emphasis is placed upon the problems of present day motor carriers. Also regulatory policies and problems.
569. **INDUSTRIAL TRAFFIC MANAGEMENT.** Prereq: Marketing 559.
A study of the factors which influence the movement of freight traffic by various media. In addition, the functions and structure of industrial traffic departments will be studied.
570. **WHOLESALE.** Prereq: Marketing 360.
Types and classes of wholesale institutions; organization and management with emphasis on selected product groups and trade area.
571. **MARKETING MANAGEMENT.** Prereq: Marketing 360 and two other marketing courses.
Management of marketing functions in their relations to one another and to the environment of the firm.
578. **PURCHASING.** Prereq: Marketing 360.
Principles and practices used by manufacturers and other types of business concerns in the purchasing of equipment, raw materials, parts, and supplies.
580. **TRANSPORTATION REGULATORY POLICY.** Prereq: Marketing 559.
Analysis of the Interstate Commerce Act and its application to the transportation industry through the study of ICC. cases. A study in depth of problems confronting regulatory agencies in transportation, current policy regarding such problems, and implications of ICC decisions.

The following courses are open only to graduate students. For detailed course descriptions, see the Graduate School Bulletin.

960. **SEMINAR IN MARKETING**
961. **MARKETING THEORY**
962. **CONTEMPORARY MARKETING PROBLEMS**

Real Estate and Insurance (REI)

Staff: Cobb, Fleeman, Leverett, Shenkel, Solomon and Sutton.

381. **PRINCIPLES OF RISK AND INSURANCE.**

Introduction to the basic principles of life, property liability and other areas

of insurance from the viewpoint of the purchaser. Consideration is given to the importance of risk in personal and business affairs and the various methods of handling risk with emphasis on insurance arrangements. Designed for non-insurance majors as well as a basis for more advanced courses.

385. CASUALTY INSURANCE.

Insurance covering losses due to accidental damage or injury to property or persons; workmen's compensation; health and accident; automobile, public liability; burglary; fidelity and dishonesty; personal liability; and other types of losses.

387. LIFE INSURANCE.

The uses of life insurance, mortality tables, types of policies, reserves and policy values, organization of life insurance companies, group and industrial insurance, legal interpretation of policies, state supervision of life insurance companies.

388. PROPERTY INSURANCE.

The functions of property insurance; standard policies; settlement of losses; marine and inland marine; automobile title; credit; other forms of property insurance.

390. REAL ESTATE PRINCIPLES.

An introductory study of real estate business; basic principles of real property ownership, utilization, and transfer; mortgage financing; brokerage; management; valuation; subdividing; legislation. Prereq: for all other real estate courses.

391. REAL ESTATE BROKERAGE. Prereq: Real Estate and Insurance 390 or consent of instructor.

An intensive study of real estate principles and practices, including construction, arithmetic, closing statements, Georgia license law, sales contracts, and terminology, with emphasis on preparation for the Georgia real estate license exam; operations of a real estate office, especially selling and ethics.

392. REAL ESTATE MANAGEMENT. Prereq: Real Estate and Insurance 390 or consent of instructor.

Principles and practices of professional management of commercial, industrial, and residential buildings; creating a management plan, merchandising space; tenant selection and relations; setting rentals; maintenance records. Background for further work toward C.P.M. designation.

502. CASUALTY INSURANCE PROBLEMS. Prereq: Real Estate and Insurance 385.

Advanced study of all types of casualty insurance; automobile, professional liability, products liability, and others.

503. PROPERTY INSURANCE PROBLEMS. Prereq: Real Estate and Insurance 388.

Practical application of property insurance policies to specific insurance problems; survey and insurance counseling for complex problems.

505. INSURANCE PLANNING AND PROGRAMMING.

Private life insurance programs correlated to social security or other group coverages; retirement programs.

506. **SOCIAL INSURANCE.**
Social security; public retirement systems; group retirement plans of private business.
507. **INSURANCE AGENCY MANAGEMENT.** Prereq: 10 hours of insurance courses.
Status of the insurance agency; management; aids from the head office; hiring and training sub-agents; sales policies; promotion; sources of contracts; duties to the principal in claims settlement; commissions; records.
508. **PROPERTY VALUATION THEORY.** Prereq: Real Estate and Insurance 390, or consent of instructor.
Analysis of the economic, social, and governmental forces influencing value. Valuation principles and theory.
509. **PROPERTY VALUATION PROBLEMS.** Prereq: Real Estate and Insurance 390 and Real Estate and Insurance 508 or consent of instructor.
Art and process of real estate valuation. Problems, case studies, and field work applying cost, market, and income approaches to specific types of properties.
510. (Finance). **REAL ESTATE FINANCE.** Prereq: Real Estate and Insurance 390, or consent of instructor.
A study of the instruments, techniques, and institutions of real estate finance; sources of funds; mortgage risk analysis; emphasis on typical policies and procedures used in financing of residential, industrial, and commercial properties, including commercial leasing.
511. **GROUP INSURANCE AND PENSIONS.** Prereq: Real Estate and Insurance 387, or consent of instructor.
A study of the nature and uses of group insurance as part of the fringe benefit programs of modern businesses. An analysis of private pensions programs in terms of benefits available and the financing methods used.
512. (Finance). **BUSINESS REAL ESTATE ANALYSIS.** Prereq: Real Estate and Insurance 390, or consent of instructor.
Analysis of principles, practices, and case studies concerned with the economic, financial, managerial, and marketing aspects of commercial and industrial real estate planning and land utilization.
513. **BUSINESS RISK MANAGEMENT.** Prereq: Economics 312 or permission of instructor.
A study of the managements of those non-speculative risks for which the organization, principles, techniques appropriate to insurance management are useful. More specifically, it will cover the methods of handling, analyzing, and dealing with risk—including both insurance and self-insurance methods.
590. **PROBLEMS IN REAL ESTATE.** Prereq: 10 hours of real estate courses, including Real Estate and Insurance 390.
Individual study of the economics of urban land use in metropolitan areas; city planning; farm and rural land economics; brokerage, and appraising; industrial real estate practice and industrial property development. Assigned study projects and field trips.

The following courses are open only to graduate students. For detailed course descriptions, see the Graduate School Bulletin.

- 987, INSURANCE SEMINAR
- 988.
- 990. REAL ESTATE SEMINAR
- 991. REAL ESTATE AND HOUSING MARKETS
- 992. URBAN RENEWAL POLICY AND PRACTICE

College of Education

COMMON COURSE OFFERINGS

The following courses are offered in various programs and departments of the College of Education, with change in content and emphasis appropriate to the program. These courses are merely listed by title under the department.

- 335. BASIC CURRICULUM. Prereq: Admission to teacher education; ECT 103 or 303 and EPY 304 or equivalent.
Determining curriculum content and planning instructional programs. Observation in selected schools.
- 336. TEACHING PROCEDURES. Prereq: Admission to teacher education; ECT 334 or 335, but may be scheduled concurrently with 335.
Study and evaluation of teaching materials and techniques by teaching field. Directed observation and planning for elementary students.
- 345. SEPTEMBER SCHOOL PRACTICUM. 1 hour. Prereq: Sophomore standing and enrollment in a teacher training program.
Supervised, two-week period of observation-participation at the beginning of the school year in a public school in or near the student's residence.
- 346, STUDENT TEACHING. 15 hours. Prereq: ECT 335 and 336 and minimum
347, grade of C in required education and teaching field courses. Prospective teach-
348, ers are placed in selected schools for an entire quarter, during which they are supervised in actual teaching in their chosen field.
- 400. SPECIAL PROBLEM. 5 hours. Prereq: Departmental enrollment. Specialized training appropriate to the needs of the individual, involving intensive library investigation or the collection and analysis of data pertinent to a given problem.
- 505. PROBLEMS OF TEACHING
Instructional procedures and evaluation of teaching in terms of pupil growth.
- 899. RESEARCH SEMINAR.
- 900. CURRICULUM PLANNING.
- 930. THESIS. 5-50 hours.
- 960, RESEARCH.
961,
962.
- 963. CRITIQUE OF EDUCATIONAL LITERATURE.
- 965. APPLIED PROJECT IN EDUCATION.

970, INTERNSHIP.

971,

972.

980, PRACTICUM.

981,

982.

Administration-Supervision (EAS)

Chairman: Doyne M. Smith

Staff: Cox, Blewett, Burnham, Gentry, Hall, Halpin, Jarvis, Kenney, Kraft, Oliver, Pounds, Sprowles, Strickland, Williams.

400. PROBLEM IN ADMINISTRATION AND SUPERVISION.

899. RESEARCH SEMINAR IN ADMINISTRATION AND SUPERVISION.

900. INTRODUCTION TO SCHOOL ADMINISTRATION.

901. ADMINISTRATION OF ELEMENTARY SCHOOLS.

902. BASIC THEORIES OF EDUCATIONAL ADMINISTRATION.

903. ADMINISTRATION AND SUPERVISION OF SCHOOL CURRICULUM.

904. SCHOOL DATA PROCESSING.

905. ADMINISTRATION OF STATE AND LOCAL SCHOOL SYSTEMS.

906. PERSONNEL ADMINISTRATION.

907. SCHOOL PLANT.

908. SIMULATION AND DECISION MAKING IN EDUCATIONAL ADMINISTRATION.

909. SCHOOL FINANCE.

910. SCHOOL BUSINESS MANAGEMENT.

911. SCHOOL LAW.

912. INTERNATIONAL EDUCATION.

913. TECHNOLOGY IN SCHOOL ADMINISTRATION.

914. SCHOOLS AS A SOCIAL SYSTEM.

915. ADMINISTRATION OF SECONDARY SCHOOLS.

921. INTRODUCTION TO SUPERVISION.

922. SUPERVISION OF INSTRUCTION.

923. CURRENT DEVELOPMENTS IN SUPERVISION.

924. GROUP DEVELOPMENT IN ADMINISTRATION AND SUPERVISION.

925. ISSUES AND THEORIES IN SUPERVISION.

926. CURRICULUM TRENDS FOR ADMINISTRATORS AND SUPERVISORS.

930. THESIS IN ADMINISTRATION AND SUPERVISION.

- 960, RESEARCH IN ADMINISTRATION AND SUPERVISION.
961,
962.
963. CRITIQUE OF LITERATURE IN ADMINISTRATION AND SUPERVISION.
965. APPLIED PROJECT IN ADMINISTRATION AND SUPERVISION.
- 970, INTERNSHIP IN ADMINISTRATION AND SUPERVISION.
971,
972.
- 980, PRACTICUM IN ADMINISTRATION AND SUPERVISION.
981,
982.

Adult Education (EAD)

Head: Bowden. Staff: Brown, Hale, Lancaster, Mahler, Masters, Miller.

400. PROBLEM IN ADULT EDUCATION.
505. METHODS IN ADULT EDUCATION.
899. RESEARCH SEMINAR IN ADULT EDUCATION.
900. CURRICULUM IN ADULT EDUCATION.
901. ADULT VOCATIONAL EDUCATION.
930. THESIS IN ADULT EDUCATION.
- 960, RESEARCH IN ADULT EDUCATION.
961,
962.
963. CRITIQUE OF LITERATURE IN ADULT EDUCATION.
965. APPLIED PROJECT IN ADULT EDUCATION.
- 970, INTERNSHIP IN ADULT EDUCATION.
971,
972.
- 980, PRACTICUM IN ADULT EDUCATION.
981,
982.

Agricultural Education (EAG)

Head: Tolbert. Staff: Duncan, O'Kelley.

(For graduate offerings in Agricultural Education,
see the listings under "Vocational Education".)

335. CURRICULUM PLANNING IN AGRICULTURAL EDUCATION.
336. TEACHING PROCEDURES IN AGRICULTURAL EDUCATION.

- 345. SEPTEMBER SCHOOL PRACTICUM IN AGRICULTURAL EDUCATION.
- 346, STUDENT TEACHING IN AGRICULTURAL EDUCATION.
- 347,
- 348.
- 349. SEMINAR IN AGRICULTURAL EDUCATION.
Prereq: EAG 346, 347, 348.
Problems emerging from experiences in student teaching.
- 400. PROBLEM IN AGRICULTURAL EDUCATION.

Art Education (EAR)

Wachowiak, Feldman

(For other courses in Art Education, See Art Education,
Art Department, College of Arts and Sciences)

- 335. BASIC CURRICULUM IN ART EDUCATION.
- 336. TEACHING PROCEDURES IN ART EDUCATION.
- 345. SEPTEMBER SCHOOL PRACTICUM IN ART EDUCATION.
- 346, STUDENT TEACHING IN ART EDUCATION.
- 347,
- 348.
- 400. PROBLEM IN ART EDUCATION.
- 899. RESEARCH SEMINAR IN ART EDUCATION.
- 960, RESEARCH IN ART EDUCATION.
- 961,
- 962.
- 963. CRITIQUE OF LITERATURE IN ART EDUCATION.
- 965. APPLIED PROJECT IN ART EDUCATION.
- 930. THESIS IN ART EDUCATION.
- 990, INTERNSHIP IN ART EDUCATION.
- 991,
- 992.
- 980, PRACTICUM IN ART EDUCATION.
- 981,
- 982.

Audiovisual Education (EAV)

Head: Skelton. Staff: Benefield, Dudley, Haynes.

- 400. PROBLEM IN AUDIOVISUAL EDUCATION.
- 500. (Library Education) UTILIZATION OF AUDIOVISUAL MATERIALS.

Criteria for selection and principles of utilization of audiovisual teaching media. Laboratory experiences to develop familiarity with materials and the ability to use various types of audiovisual equipment.

501. PREPARATION OF INEXPENSIVE AUDIOVISUAL MATERIALS.
Laboratory course in the preparation of display and exhibit materials, and overhead and slide projectuals.
502. (Journalism) EDUCATIONAL TELEVISION PRODUCTION.
Television teaching techniques. Preparation of an educational television lesson series. Observations of studio operations. Relationship of television production problems to the use of television as a teaching medium.
503. (Journalism) ADVANCED EDUCATIONAL TELEVISION PRODUCTION.
Studio practice and operation. Production of educational television lessons followed by critical analysis during playback of video tape.
899. RESEARCH SEMINAR IN AUDIOVISUAL EDUCATION.
900. SURVEY OF AUDIOVISUAL COMMUNICATIONS.
901. ADMINISTRATION OF AUDIOVISUAL SERVICES.
902. PRODUCTION OF AUDIOVISUAL MATERIALS.
930. THESIS IN AUDIOVISUAL EDUCATION.
960. RESEARCH IN AUDIOVISUAL EDUCATION.
- 961,
- 962.
963. CRITIQUE OF LITERATURE IN AUDIOVISUAL EDUCATION.
965. APPLIED PROJECT IN AUDIOVISUAL EDUCATION.
970. INTERNSHIP IN AUDIOVISUAL EDUCATION.
- 971,
- 972.

Business Education (EBE)

Head: Calhoun. Staff: Kinzey, Sheppard, Tootle.

99. PERSONAL TYPING.
An introductory course in typewriting for personal use.
200. BUSINESS COMMUNICATIONS.
Principles and practice in the writing of business letters and reports; collecting, organizing, and interpreting data.
300. SHORTHAND
Gregg Shorthand: theory, development of skill and reading and writing, dictation, and transcription.
301. SHORTHAND.
Continuation of EBE 300.
302. SHORTHAND.
Continuation of EBE 301.

303. **TYPEWRITING.**
Introductory typewriting.
304. **TYPEWRITING.**
Intermediate typewriting.
305. **TYPEWRITING.**
Advanced typewriting.
306. **TRANSCRIPTION.**
Advanced dictation and transcription.
310. **SECRETARIAL OFFICE PRACTICE.**
Secretarial traits and duties; filing; operation of dictating, duplicating, and other office machines.
311. **OFFICE MACHINES.**
Practicum in the use of office machines: desk calculators, adding machines, duplicating machines, electric typewriters, dictating and transcribing machines.
335. **BASIC CURRICULUM IN BUSINESS EDUCATION.**
336. **TEACHING PROCEDURES IN BUSINESS EDUCATION.**
345. **SEPTEMBER PRACTICUM IN BUSSINESS EDUCATION.**
346. **STUDENT TEACHING IN BUSINESS EDUCATION.**
- 347.
- 348.
400. **PROBLEM IN BUSINESS EDUCATION.**
501. **THEORY AND PRINCIPLES IN SHORTHAND, TYPEWRITING AND TRANSCRIPTION FOR TEACHERS.**
3 hours. Prereq: EBE 302, 305, EBE 336 or equivalent. Teaching theory, psychological principles of skill building, and evaluation.
502. **PRINCIPLES AND PROBLEMS OF BASIC BUSINESS SUBJECTS FOR TEACHERS.**
Development of units, selection and organization of material, student motivation, and evaluation in the basic high school business subjects.
503. **ADVANCED OFFICE PRACTICE AND MACHINES FOR TEACHERS.**
Unit development, laboratory practice, and evaluation in the high school teaching of office practice and machine use.
504. **PRINCIPLES AND PROBLEMS OF BOOKKEEPING FOR TEACHERS.**
Materials, teaching procedures, standards, and evaluation in the teaching of the bookkeeping cycle.
507. **OFFICE MANAGEMENT.**
Scientific office management: principles, equipment, supervision, office records and reports, methods and procedures, filing, selection and training of office personnel.
576. (Home Economics) **FAMILY FINANCE EDUCATION.**
Economic factors related to sound family financial planning; using and accounting for money, acquiring financial resources, covering risks, and planning estates. Development of instructional materials for classroom use.

- 899. RESEARCH SEMINAR IN BUSINESS EDUCATION.
- 901. TESTS AND MEASUREMENTS IN BUSINESS EDUCATION.
- 902. ADMINISTRATION AND SUPERVISION OF BUSINESS EDUCATION.
- 905. DATA PROCESSING.
- 930. THESIS IN BUSINESS EDUCATION.
- 960, RESEARCH IN BUSINESS EDUCATION.
- 961,
- 962.
- 965. APPLIED PROJECT IN BUSINESS EDUCATION.
- 963. CRITIQUE OF LITERATURE IN BUSINESS EDUCATION.
- 970, INTERNSHIP IN BUSINESS EDUCATION.
- 971,
- 972.

Counselor Education and Personal Services (ECP)

Head: Bonney. Staff: Asbury, Ball, Bartee, Blakeman, Costantino, Gazda, Hartley, Holt, Irvine, Jones, Moyer, Phelps, Porter, Rooks, Settles, Sorrels, Swain, Wheeler, Wierson.

- 500. FUNDAMENTALS OF GUIDANCE IN ELEMENTARY AND SECONDARY SCHOOLS.
An introduction to professional training for counselors and an opportunity for teachers to acquire an over-view of guidance functions in the school program.
- 501. INDIVIDUAL APPRAISAL.
Techniques for discovering characteristics of individuals. Students will develop competencies in recording, analyzing, correlating, and interpreting data as they relate to counseling.
- 899. RESEARCH SEMINAR IN COUNSELOR EDUCATION.
- 900. COUNSELING.
- 901. VOCATIONAL DEVELOPMENT.
- 902. STUDENT PERSONNEL SERVICES.
- 903. STUDENT PERSONNEL SERVICES IN HIGHER EDUCATION.
- 904. ADVANCED THEORIES OF COUNSELING.
- 905. PRINCIPLES OF GROUP GUIDANCE.
- 906. THEORY AND PROCEDURES OF GROUP COUNSELING.
- 920. INTRODUCTION TO REHABILITATION COUNSELING.
- 921. MEDICAL AND PSYCHOLOGICAL ASPECTS OF DISABILITY.
- 930. THESIS IN COUNSELOR EDUCATION.
- 960, RESEARCH IN COUNSELOR EDUCATION.
- 961,
- 962.

- 963. CRITIQUE OF LITERATURE IN COUNSELOR EDUCATION.
- 965. APPLIED PROJECT IN COUNSELOR EDUCATION.
- 970. INTERNSHIP IN COUNSELOR EDUCATION.
- 971.
- 972.
- 973. INTERNSHIP IN REHABILITATION COUNSELLING.
- 974.
- 975.
- 980. PRACTICUM IN COUNSELOR EDUCATION.
- 981.
- 982.
- 983. PRACTICUM IN REHABILITATION COUNSELING.
- 984.
- 985.
- 986. PRACTICUM IN GROUP COUNSELING.

Curriculum and Teaching (ECT)

Head: Wootton. Staff: Bell, Chipley, Compton, Cromartie, Ellis, E., James, Mills, Perrodin, Shearron.

- 103. INTRODUCTION TO EDUCATION.
or The study of teaching as a profession and present status of the public schools;
- 303. student appraisal of personal aptitudes and choice of professional goals.
- 333. BASIC CURRICULUM IN EARLY CHILDHOOD EDUCATION.
- 334. BASIC CURRICULUM IN THE ELEMENTARY SCHOOL.
- 335. BASIC CURRICULUM IN THE SECONDARY SCHOOL.
- 400. PROBLEM IN CURRICULUM AND TEACHING.
- 505. PROBLEMS OF TEACHING IN THE ELEMENTARY SCHOOL.
- 506. TEAM TEACHING IN THE ELEMENTARY SCHOOL.
- 800. FUNDAMENTALS OF THE CURRICULUM.
- 801. CURRICULUM TRENDS.
- 900. CURRICULUM PLANNING.
- 960. RESEARCH IN CURRICULUM AND TEACHING.
- 961.
- 962.
- 963. CRITIQUE OF LITERATURE IN CURRICULUM AND TEACHING.
- 965. APPLIED PROJECT IN CURRICULUM AND TEACHING.
- 970. INTERNSHIP IN CURRICULUM AND TEACHING.
- 971.
- 972.

- 980, PRACTICUM IN CURRICULUM AND TEACHING.
981,
982.

Distributive Education (EDE)

Head: Cheshire. Staff: Brown.

(For other graduate offerings in Distributive Education,
see listings under "Vocational Education.")

100. INTRODUCTION TO DISTRIBUTIVE EDUCATION.
Aims, organization, and activities of a Distributive Education program.
200. DISTRIBUTIVE OCCUPATIONAL EXPERIENCE: BASIC.
Over-view of on-the-job experiences in distributive education, with work experience in marketing and distribution.
301. ORGANIZATION OF DISTRIBUTIVE EDUCATION.
The distributive education program at the Federal, State, and local level; duties of the teacher-coordinator; operation of the adult distributive education program; visits to program; visits to programs in operation.
335. BASIC CURRICULUM IN DISTRIBUTIVE EDUCATION.
336. TEACHING PROCEDURES IN DISTRIBUTIVE EDUCATION.
345. STUDENT PRACTICUM IN DISTRIBUTIVE EDUCATION.
346. STUDENT TEACHING IN DISTRIBUTIVE EDUCATION.
347,
348.
500. DISTRIBUTIVE OCCUPATIONAL EXPERIENCE: SALES.
Directed work-experience in cooperating distributive business; 500 hours in sales or sales-supporting business prior to senior year.
501. DISTRIBUTIVE OCCUPATIONAL EXPERIENCE: JUNIOR MANAGEMENT.
Directed work-experience in cooperating distributive business; 500 hours in supervisory and junior management positions.
502. ADULT DISTRIBUTIVE EDUCATION.
Objectives, problems, organization, and promotion of adult distributive education training.
503. COORDINATION OF DISTRIBUTIVE EDUCATION.
Standards, selection, and guidance of students in distributive education programs; standards and selection of training stations in cooperating distributive businesses.

Early Childhood Education (ECE)

Head: Sutton. Staff: Aderhold, Bauch, Eldredge, Jennings, Johnson, Newman, Stone.

333. BASIC CURRICULUM IN EARLY CHILDHOOD EDUCATION.

- 346. STUDENT TEACHING IN EARLY CHILDHOOD EDUCATION.
- 347,
- 348.
- 400. PROBLEM IN EARLY CHILDHOOD EDUCATION.
- 500. PRE-PRIMARY SCHOOL EDUCATION.
Facilities, equipment, organization, and administration of curricula in pre-primary education.
- 501. CURRENT TRENDS IN EARLY CHILDHOOD EDUCATION.
Interdisciplinary factors and research in the education of children ages three to eight.
- 899. RESEARCH SEMINAR IN EARLY CHILDHOOD EDUCATION.
- 960. RESEARCH IN EARLY CHILDHOOD EDUCATION.
- 961,
- 962.
- 963. CRITIQUE OF EDUCATIONAL LITERATURE IN EARLY CHILDHOOD EDUCATION.
- 965. APPLIED PROJECT IN EARLY CHILDHOOD EDUCATION.
- 970. INTERNSHIP IN EARLY CHILDHOOD EDUCATION.
- 971,
- 972.
- 980. PRACTICUM IN EARLY CHILDHOOD EDUCATION.
- 981,
- 982.

Educational Philosophy (EPH)

Head: Newsome. Staff: Heslep.

- 800. BASIC ISSUES IN EDUCATION.
- 801. PHILOSOPHY OF EDUCATION.
- 802. HISTORY OF EDUCATION.
- 803. AMERICAN HIGHER EDUCATION.
- 804. PRAGMATISM AND EDUCATION.
- 805. LOGICAL ASPECTS OF EDUCATION.
- 806. SOCIAL AND POLITICAL PHILOSOPHIES OF EDUCATION.
- 807. ETHICS AND EDUCATION.
- 808. CONTEMPORARY PHILOSOPHIES OF EDUCATION.
- 899. RESEARCH SEMINAR IN EDUCATIONAL PHILOSOPHY.
- 930. THESIS IN EDUCATIONAL PHILOSOPHY.
- 960. RESEARCH IN EDUCATIONAL PHILOSOPHY.
- 961,
- 962.

964. CRITIQUE OF LITERATURE IN EDUCATIONAL PHILOSOPHY.
970, INTERNSHIP IN EDUCATIONAL PHILOSOPHY.
971,
972.

Educational Psychology and Measurement (EPY) and Research (ERS)

Head: Torrance. Staff: Anderson, Bashaw, Bledsoe, Bruch, Dekle, Eubank, Findley, Greene, Kingston, Kohler, Ohnmacht, Powell, Reynolds, Schab, O. Scott, Shufelt, Sorkey, Weaver, White.

BASIC COURSES

201. HUMAN DEVELOPMENT AND THE EDUCATIVE PROCESS. 3 hours. Mental, physical, emotional, and social growth of the elementary school child in relation to learning. Directed observation.
304. EDUCATIONAL PSYCHOLOGY.
Application of psychology to problems of child growth and development, learning, motivation, measurements, personality adjustment and mental hygiene, and individual differences.
305. ADOLESCENT PSYCHOLOGY. Prereq: Education 304 or equivalent.
Interests, needs, and abilities of adolescents; evaluation of their total development.
401. PSYCHOLOGY OF CHILDHOOD. Prereq: Education 304 or equivalent.
Interests, needs, and abilities of elementary pupils; evaluation of their total development.
472. (Psychology). PROGRAMMED INSTRUCTION. Prereq: Psychology 101 or Education 304.
Theory, evaluation, and writing techniques, with practice in writing a program.
500. TEST AND MEASUREMENT. Prereq: Four courses in education.
Nature and function of measurement in education. Teacher-made and standardized tests and scales. Introductory statistical concepts of measurement.
505. CLASSROOM LEARNING PROBLEMS OF DISADVANTAGED CHILDREN AND YOUTH. Prereq: EPY 304.
Psychological characteristics of economically, culturally, and educational disadvantaged children and youth, special classroom learning problems, and classroom learning problems in integrated schools.

CHILD AND ADOLESCENT

801. FUNDAMENTALS OF CHILD STUDY.
802. THEORIES OF CHILD DEVELOPMENT.
803. ADVANCED CHILD STUDY.

- 804. PSYCHOSOCIAL ADJUSTMENT OF THE CHILD AND ADOLESCENT.
- 810. ADVANCED ADOLESCENT PSYCHOLOGY.
- 811. CHARACTERISTICS OF GIFTED CHILDREN AND YOUTH.

LEARNING AND PROGRAMMING

- 815. ADVANCED EDUCATIONAL PSYCHOLOGY.
- 816. PROBLEMS IN EDUCATIONAL PSYCHOLOGY.
- 817. PSYCHOLOGY OF READING.
Psychological correlates of reading ability and disability; psychological bases for instructional methods and materials.
- 818. PSYCHOLOGY OF CLASSROOM LEARNING.
- 819. COGNITIVE PROCESSES AND EDUCATION.
- 820. LEARNING DIFFICULTIES OF GIFTED CHILDREN AND YOUTH.

PSYCHOLOGY OF GROUP BEHAVIOR

- 825. GROUP DYNAMICS.
- 826. ANALYSIS OF BEHAVIOR IN GROUPS.
- 827. COMPLEX STUDIES OF GROUP FORCES IN MENTAL FUNCTIONING.

SCHOOL PSYCHOLOGY

- 830. INTRODUCTION TO SCHOOL PSYCHOLOGY.

TEST AND MEASUREMENT

- 900. ADVANCED EDUCATIONAL MEASUREMENT.
- 901. EDUCATIONAL DIAGNOSIS AND TREATMENT.
- 902. CONSTRUCTION OF EDUCATIONAL TESTS.
- 903. SCHOOL TESTING PROGRAMS.
- 904. PROBLEMS IN THE EVALUATION OF INSTRUCTION.
- 905. EVALUATION IN EDUCATION.
- 906. ASSESSMENT OF GIFTED CHILDREN AND YOUTH.
- 907. INDIVIDUAL EDUCATIONAL TESTING.

RESEARCH IN EDUCATIONAL PSYCHOLOGY

- 899. RESEARCH SEMINAR IN EDUCATIONAL PSYCHOLOGY.
- 930. THESIS IN EDUCATIONAL PSYCHOLOGY.
- 960. RESEARCH IN EDUCATIONAL PSYCHOLOGY.
- 961.
- 962.
- 963. CRITIQUE OF LITERATURE IN EDUCATIONAL PSYCHOLOGY.
- 965. APPLIED PROBLEM IN EDUCATIONAL PSYCHOLOGY.

INTERNSHIP AND PRACTICUM

970, INTERNSHIP IN EDUCATIONAL PSYCHOLOGY.

971,

972.

973, INTERNSHIP IN SCHOOL PSYCHOLOGY.

974,

975.

980, PRACTICUM IN EDUCATIONAL PSYCHOLOGY.

981,

982.

983, PRACTICUM IN SCHOOL PSYCHOLOGY.

984,

985.

RESEARCH (ERS)

801. METHODS OF RESEARCH IN EDUCATION.

811. (Statistics) STATISTICAL METHODS IN EDUCATION.

812. (Statistics) ADVANCED STATISTICS IN EDUCATION AND PSYCHOLOGY.

813. (Statistics) RESEARCH DESIGN IN EDUCATION.

970, INTERNSHIP IN EDUCATIONAL RESEARCH.

971,

972.

980, PRACTICUM IN EDUCATIONAL RESEARCH.

981,

982.

Elementary (EEL) and Early Childhood (ECE)
Education

Sutton, Coordinator

Courses leading to professional certification, Nursery—Grade 8, are listed by Departments.

The basic undergraduate sequence in professional education for the preparation of elementary teachers and teachers of pre-school and primary grades consists of the following courses:

EPY201. HUMAN DEVELOPMENT AND THE EDUCATIVE PROCESS. 3 hours.

ECT303. INTRODUCTION TO EDUCATION.

EEN300. CHILDREN'S LITERATURE. 3 hours.

- EPY 304. EDUCATIONAL PSYCHOLOGY.
- ECT 333. BASIC CURRICULUM IN EARLY CHILDHOOD EDUCATION.
- ECT 334. BASIC CURRICULUM IN THE ELEMENTARY SCHOOL.
- EEN 337. ELEMENTARY LANGUAGE ARTS METHODS. 3 hours.
- EMT 338. ELEMENTARY MATHEMATICS METHODS. 3 hours.
- ESC 339. ELEMENTARY SCIENCE METHODS. 3 hours.
- ESS 340. ELEMENTARY SOCIAL STUDIES METHODS. 3 hours.
- ERD 401. TEACHING OF READING.
- ERD 402. ANALYSIS AND CORRECTION OF READING DISABILITIES.
The September School Practicum and Student Teaching are sectioned
as Early Childhood (ECE) (Nursery through Grade 3) or Elementary
(EEL) (Grades 1-8) depending on the area of concentration.
345. SEPTEMBER SCHOOL PRACTICUM. 1 hour.
- 346, STUDENT TEACHING. 15 hours.
- 347,
- 348.

English Education (EEN)

Head: Tingle. Staff: Acheson, Cooper, Ellis, G., Gregory, Jordan, Veal.

300. CHILDREN'S LITERATURE. 3 hours.
Literature suitable for elementary school children; stimulation of children's
reading.
336. METHODS OF ENGLISH EDUCATION—SECONDARY.
338. ELEMENTARY LANGUAGE ARTS METHODS. 3 hours. Prereq: ECT 335,
but usually will be scheduled concurrently with ECT 335.
Study and evaluation of teaching materials and techniques in language arts for
elementary schools.
345. SEPTEMBER PRACTICUM IN ENGLISH EDUCATION.
- 346, STUDENT TEACHING IN SECONDARY ENGLISH.
- 347,
- 348.
400. PROBLEM IN ENGLISH EDUCATION.
403. (Reading) TEACHING READING IN THE SECONDARY SCHOOL.
504. TEACHING ENGLISH IN THE ELEMENTARY SCHOOL.
Instructional procedures, materials, and evaluation in teaching English, includ-
ing oral and written composition, spelling, handwriting, and grammar in the
elementary school.
505. TEACHING SECONDARY ENGLISH.
506. TEACHING SECONDARY ENGLISH LITERATURE.
507. TEACHING SECONDARY GRAMMAR AND COMPOSITION.

- 566. (Journalism) JOURNALISM IN THE SECONDARY SCHOOL.
- 899. RESEARCH SEMINAR IN ENGLISH EDUCATION.
- 900. CURRICULUM IN ENGLISH EDUCATION.
- 901. (Library Education) GUIDING THE READING OF CHILDREN.
- 902. (Library Education) GUIDING THE READING OF YOUNG PEOPLE.
- 930. THESIS IN ENGLISH EDUCATION.
- 960, RESEARCH IN ENGLISH EDUCATION.
- 961,
- 962.
- 964. CRITIQUE OF LITERATURE IN ENGLISH EDUCATION.
- 965. APPLIED PROJECT IN ENGLISH EDUCATION.
- 970, INTERNSHIP IN ENGLISH EDUCATION.
- 971,
- 972.

Foreign Language Education (EFL)

Kalivoda, Romance Languages; Elkins, Germanic Languages.

- 336. TEACHING PROCEDURES—FOREIGN LANGUAGE.
- 345. SEPTEMBER SCHOOL PRACTICUM IN FOREIGN LANGUAGE.
- 346, STUDENT TEACHING IN FOREIGN LANGUAGE.
- 347,
- 348.
- 400. PROBLEM IN FOREIGN LANGUAGE EDUCATION.
- 581. (MODERN FOREIGN LANGUAGES). PROBLEMS OF TEACHING ROMANCE LANGUAGES.
- 899. RESEARCH SEMINAR IN FOREIGN LANGUAGE EDUCATION.
- 900. CURRICULUM IN FOREIGN LANGUAGE EDUCATION.
- 930. THESIS IN FOREIGN LANGUAGE EDUCATION.
- 960, RESEARCH IN FOREIGN LANGUAGE EDUCATION.
- 961,
- 962.
- 963. CRITIQUE OF LITERATURE IN FOREIGN LANGUAGE EDUCATION.
- 965. APPLIED PROJECT IN FOREIGN LANGUAGE EDUCATION.
- 970, INTERNSHIP IN FOREIGN LANGUAGE EDUCATION.
- 971,
- 972.

Home Economics Education (EHE)

Head: Cross. Staff: Beall, Boyd.

(For graduate offerings in Home Economics Education, see the listings under "Vocational Education.")

- 335. CURRICULUM PLANNING IN HOME ECONOMICS.
- 336. METHODS OF TEACHING HOME ECONOMICS.
- 345. SEPTEMBER SCHOOL PRACTICUM IN HOME ECONOMICS.
- 346, STUDENT TEACHING IN HOME ECONOMICS.
- 347,
- 348.
- 400. PROBLEM IN HOME ECONOMICS EDUCATION.

Industrial Arts (EIA)

Head: Harrison. Staff: Nix, Parr, Pollack.

- 100. GENERAL SHOP. One single and four double periods.
General survey of a wide variety of materials, tools, and procedures.
- 101. BEGINNING WOODWORK. One single and four double periods.
Planning, construction, and finishing of industrial arts woodworking projects.
- 102. INDUSTRIAL ARTS DRAFTING. One single and four double periods.
Reading and writing a graphic language; developing working drawings which have application to industrial arts projects.
- 300. ADVANCED GENERAL SHOP. One single and four double periods.
A continuation of Industrial Arts 100 in which the student works on advanced projects and gains experience in carrying on a general shop program.
- 305. ADVANCED WOODWORK. One single and four double periods.
A continuation of beginning woodwork with more emphasis on power machinery.
- 310. METAL WORK. One single and four double periods.
Planning, construction, and finishing of projects in metal; development of skill in the use of hand tools.
- 315. POWER MACHINES.
A study of the production and utilization of power in modern industry and transportation. Consideration will be given to pneumatic, hydraulic, electronic, diesel and jet systems.
- 320. BASIC ELECTRICAL TECHNOLOGY. One single and four double periods.
Introductory electricity and electronics; application of principles to projects.
- 325. BLUE PRINT READING AND PROCESSING. One single and four double periods.
Solution of blue print reading problems of various industries; construction and development of drawings, tracings, and prints.
- 326. ADVANCED DRAFTING. One single and four double periods.
A continuation of beginning drafting. Advanced problems in drafting and machine design are studied.

327. MACHINE DRAFTING AND DESIGN. One single and four double periods. Advanced problems will be developed in drafting, such as shape description, auxiliaries, sections, layouts, isometrics, and perspective.
328. INDUSTRIAL ARTS DESIGN. One single and four double periods. Application of industrial art design to student projects.
330. DEVELOPMENT OF AMERICAN INDUSTRIES. Common industrial materials and their production; size and cost estimate; application of mathematics to industrial arts work.
332. INDUSTRIAL ARTS AND HANDICRAFT FOR TEACHERS. One single and four double periods. The place and type of industrial arts suitable for adults, camp counselors, teachers, homemakers, and others interested in creative activities.
335. CURRICULUM PLANNING IN INDUSTRIAL ARTS.
336. METHODS IN INDUSTRIAL ARTS.
345. SEPTEMBER SCHOOL PRACTICUM IN INDUSTRIAL ARTS.
346. STUDENT TEACHING IN INDUSTRIAL ARTS.
- 347,
- 348.
400. PROBLEM IN INDUSTRIAL ARTS.
501. WOODWORKING. Prereq: EIA 305. Individual problem in advanced woodworking.
502. ADVANCED METAL TECHNOLOGY. Prereq: EIA 310. Individual problem in advanced metal technology.
503. POWER MACHINES. Prereq: EIA 315. Individual problem in advanced power machines.
504. ADVANCED ELECTRONICS TECHNOLOGY. Prereq: Industrial Arts 320. Individual problem in advanced electronics.
505. DRAFTING. Prereq: EIA 328. Individual problem in advanced drafting.
510. PRINCIPLES OF INDUSTRIAL ARTS EDUCATION. History, principles, function, organization, and evaluation.
511. ORGANIZATION OF SUBJECT MATTER IN INDUSTRIAL ARTS. Selection, organization, presentation, and interpretation of subject matter in industrial arts. Students will work out job plans, instruction sheets, and plan course content.
512. ADMINISTRATION OF INDUSTRIAL ARTS. Interpretation of industrial arts curricula in terms of school and community needs. Organization and reorganization of shop programs. Cost accounting of materials, equipment, supplies, and housing.
513. SPECIAL PROBLEM IN INDUSTRIAL ARTS. 5-10 hours. Improvements of curriculum and teaching procedures through intensive training in a particular area of interest.

514. SEMINAR IN INDUSTRIAL ARTS AND HANDICRAFTS.
Advanced study in industrial arts and handicrafts. Research and experimentation in selected areas of the industrial arts.

Library Education (ELE)

Head: R. White. Staff: Bentley, Cawthon, Cox.

300. REFERENCE MATERIALS AND METHODS. Prereq: Senior college standing and consent of instructor.
A study of reference sources and use of the library as an information laboratory.
301. INTRODUCTION TO CLASSIFICATION AND CATALOGING. Prereq: Senior college standing and consent of instructor.
Instruction and practice in the organization of library materials based on the Dewey Decimal Classification.
302. ADMINISTRATION OF A SMALL LIBRARY. Prereq: Senior college standing and consent of instructor.
Housing, equipment, staff, public relations, and other aspects of library management.
400. PROBLEM IN LIBRARY EDUCATION.
500. (AUDIO-VISUAL EDUCATION) UTILIZATION OF AUDIO-VISUAL MATERIALS.
501. BOOK SELECTION AND PURCHASE. Prereq: Senior college standing and consent of instructor.
A study of selection aids, book reviewing, reading lists, book publishers and publishing standards useful in balancing a collection, and methods of reading guidance.
502. THE LIBRARY IN THE INSTRUCTIONAL PROGRAM.
A critical examination of the improvement of instruction by correlating library use with elementary and secondary school curricula; material selection for the enrichment of teaching at all grade levels.
503. THE PUBLIC LIBRARY.
History, organization, administration, services, and function of public libraries.
899. RESEARCH SEMINAR IN LIBRARY EDUCATION.
900. LIBRARIES IN THE SOCIAL ORDER.
901. GUIDING THE READING OF CHILDREN.
902. GUIDING THE READING OF YOUNG PEOPLE.
903. THE ADMINISTRATION OF THE LIBRARY IN THE MODERN SCHOOL.
904. REFERENCE AND BIBLIOGRAPHIC MATERIALS FOR SUBJECT FIELDS.
905. SCHOOL LIBRARY SUPERVISION.
906. ADVANCED CLASSIFICATION AND CATALOGING.
907. THE ACADEMIC LIBRARY.
908. SPECIAL LIBRARIES.

- 930. THESIS IN LIBRARY EDUCATION.
- 960, RESEARCH IN LIBRARY EDUCATION.
- 961,
- 962.
- 963. CRITIQUE OF LITERATURE IN LIBRARY EDUCATION.
- 965. PROJECT IN APPLIED LIBRARY EDUCATION.
- 970, INTERNSHIP IN LIBRARY EDUCATION.
- 971,
- 972.

Mathematics Education (EMT)

Head: Pikaart. Staff: Hooten, McKillip, Robinson, Steffe.

- 336. TEACHING PROCEDURES IN SECONDARY MATHEMATICS.
- 337. ELEMENTARY MATHEMATICS METHODS. 3 hours. Prereq: Education 335, but usually will be scheduled concurrently with Education 335.
Study and evaluation of teaching materials and techniques in mathematics for elementary schools.
- 345. SEPTEMBER SCHOOL PRACTICUM IN SECONDARY MATHEMATICS.
- 346, STUDENT TEACHING IN SECONDARY MATHEMATICS.
- 347,
- 348.
- 400. PROBLEM IN MATHEMATICS EDUCATION.
- 501. TEACHING ARITHMETIC IN THE ELEMENTARY SCHOOL.
Instructional procedures, materials, and evaluation in teaching modern mathematics in the elementary school.
- 505. PROBLEMS OF TEACHING SECONDARY MATHEMATICS.
- 510. TEACHING ARITHMETIC TO EDUCATIONALLY DEPRIVED CHILDREN.
Methods and materials in teaching arithmetic to compensate for educational deprivation.
- 511. ARITHMETIC FOR TEACHERS OF EDUCATIONALLY DEPRIVED CHILDREN.
Basic mathematical concepts and skills to teach arithmetic to educationally deprived children.
- 512. ELEMENTARY SCHOOL ALGEBRA AND GEOMETRY FOR TEACHERS OF EDUCATIONALLY DEPRIVED CHILDREN.
Basic algebraic and geometric concepts to teach educationally deprived children.
- 515. (MATHEMATICS). CONTEMPORARY GENERAL MATHEMATICS.
Probability, direct and indirect measurement, and algebraic and numerical concepts applicable to junior high and secondary mathematics courses.
- 900. CURRICULUM IN MATHEMATICS EDUCATION.

- 930. THESIS IN MATHEMATICS EDUCATION.
- 960. RESEARCH IN MATHEMATICS EDUCATION.
- 961,
- 962.
- 963. CRITIQUE OF EDUCATIONAL LITERATURE IN MATHEMATICS EDUCATION.
- 965. APPLIED PROJECT IN MATHEMATICS EDUCATION.
- 970. INTERNSHIP IN MATHEMATICS EDUCATION.
- 971,
- 972.

Music Education (EMU)

Head: Gerschefski. Staff: Arant, Dooley, Douglas, Harriman, John, Parker.

(For other courses in Music Education, see Music Education,
Department of Music, College of Arts and Sciences.)

- 346. STUDENT TEACHING IN MUSIC EDUCATION.
- 347,
- 348.
- 400. PROBLEM IN MUSIC EDUCATION.
- 899. RESEARCH SEMINAR IN MUSIC EDUCATION.
- 930. THESIS IN MUSIC EDUCATION.
- 960. RESEARCH IN MUSIC EDUCATION.
- 961,
- 962.
- 963. CRITIQUE OF LITERATURE IN MUSIC EDUCATION.
- 965. APPLIED PROJECT IN MUSIC EDUCATION.
- 970. INTERNSHIP IN MUSIC EDUCATION.
- 971,
- 972.

Reading Education (ERD)

Head: Aaron. Staff: Callaway, Cooper, Dolvin, Jacobs, Jerrolds, Mason, Olson, Simpson.

- 400. PROBLEM IN READING EDUCATION.
- 401. THE TEACHING OF READING.
A systematic coverage of the teaching of reading, including methods, techniques, and materials, from first through twelfth grades.
- 402. THE ANALYSIS AND CORRECTION OF READING DISABILITIES.
Causes of reading disability: methods of diagnosis; procedures and materials for corrective work, group and individual.

403. TEACHING READING IN THE SECONDARY SCHOOL.
The development of reading skills needed by students in Grades 7-12 for success in school subjects.
817. (EDUCATIONAL PSYCHOLOGY). PSYCHOLOGY OF READING.
899. RESEARCH SEMINAR IN READING EDUCATION.
900. TRENDS AND PRACTICES IN THE TEACHING OF READING.
930. THESIS IN READING EDUCATION.
- 960, RESEARCH IN READING EDUCATION.
- 961,
- 962.
963. CRITIQUE OF LITERATURE IN READING EDUCATION.
965. APPLIED PROJECT IN READING EDUCATION.
- 970, INTERNSHIP IN READING EDUCATION.
- 971,
- 972.
- 980, PRACTICUM IN READING EDUCATION.
- 981,
- 982.

School Social Work (ESW)

Miss Nesbit

(For other courses in Social Work, See School of Social Work)

400. PROBLEM IN SCHOOL SOCIAL WORK.
500. SCHOOL SOCIAL WORK.
Basic problems faced by school social workers, selected on the basis of group needs.
963. CRITIQUE OF LITERATURE IN SCHOOL SOCIAL WORK.
965. APPLIED PROJECT IN SCHOOL SOCIAL WORK.
- 970, INTERNSHIP IN SCHOOL SOCIAL WORK.
- 971,
- 972.
- 980, PRACTICUM IN SCHOOL SOCIAL WORK.
- 981,
- 982.

Science Education (ESC)

Head: Shrum. Staff: Ayers, Bauch, Koelsche, Zeitler.

336. SECONDARY SCIENCE METHODS.
339. ELEMENTARY SCIENCE METHODS. 3 hours. Prereq: Education 335, but usually will be scheduled concurrently with Education 335.

- 345. SEPTEMBER SCHOOL EXPERIENCE.
- 346. STUDENT TEACHING IN SCIENCE EDUCATION.
- 347,
- 348.
- 400. PROBLEM IN SCIENCE EDUCATION.
- 502. TEACHING SCIENCE IN THE ELEMENTARY SCHOOL.
Instructional procedures, materials, and evaluation in teaching biological and physical sciences in the elementary school.
- 505. PROBLEMS OF TEACHING—SECONDARY SCIENCE.
- 899. RESEARCH SEMINAR IN SCIENCE EDUCATION.
- 900. CURRICULUM PLANNING IN SCIENCE EDUCATION.
- 901. PROBLEMS OF TEACHING COLLEGE SCIENCE.
- 902. HISTORY AND THEORY OF SCIENCE EDUCATION.
- 930. THESIS IN SCIENCE EDUCATION.
- 960, RESEARCH IN SCIENCE EDUCATION.
- 961,
- 962.
- 963. CRITIQUE OF LITERATURE IN SCIENCE EDUCATION.
- 965. APPLIED PROJECT IN SCIENCE EDUCATION.
- 970, INTERNSHIP IN SCIENCE EDUCATION.
- 971,
- 972.

Secondary Education

Singleton, Coordinator

Courses leading to professional certification, Grades 8-12, are offered in the following twelve teaching fields: Agricultural Education, Business Education, Distributive Education, English, Foreign Language, Home Economics, Industrial Arts, Mathematics, Science, Social Studies, Speech, and Trade and Industrial Education.

Dr. Singleton is coordinator for the following five areas: English, Mathematics, Foreign Language, Science, Social Science, and Speech.

For courses offered, see the listings by Departments.

The basic undergraduate sequence in professional education for preparation in a secondary teaching field consists of the following courses:

- ECT 303. INTRODUCTION TO EDUCATION.
- EPY 304. EDUCATIONAL PSYCHOLOGY.
- ECT 335. CURRICULUM IN THE SECONDARY SCHOOL.
- 336. TEACHING PROCEDURES—SECTIONED BY TEACHING FIELD.
- 345. SEPTEMBER SCHOOL PRACTICUM—SECTIONED BY TEACHING FIELD.

- 346, STUDENT TEACHING—SECTIONED BY TEACHING FIELD.
347,
348.

Social Science Education (ESS)

Head: McLendon. Staff: J. Ball, Berryman, Dooley, Hawkins, Kelley, Rice, Sandberg, Stephens, Stone, Templeton.

336. TEACHING PROCEDURES IN SECONDARY SOCIAL SCIENCE.
340. ELEMENTARY SOCIAL STUDIES METHODS. 3 hours. Prereq: Education 335, but usually will be scheduled concurrently with Education 335.
Study and evaluation of teaching materials and techniques in social studies for elementary schools.
345. SEPTEMBER SCHOOL PRACTICUM IN SECONDARY SOCIAL SCIENCE.
- 346, STUDENT TEACHING IN SECONDARY SOCIAL SCIENCE.
347,
348.
400. PROBLEM IN SOCIAL SCIENCE EDUCATION.
503. TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL.
Instructional procedures, materials, and evaluation in teaching social science, including anthropology, economics, geography, and history, in the elementary school.
505. PROBLEMS OF TEACHING—SECONDARY SOCIAL SCIENCE.
899. RESEARCH SEMINAR IN SOCIAL SCIENCE EDUCATION.
900. CURRICULUM IN SOCIAL SCIENCE EDUCATION.
930. THESIS IN SOCIAL SCIENCE EDUCATION.
- 960, RESEARCH IN SOCIAL SCIENCE EDUCATION.
961,
962.
963. CRITIQUE OF EDUCATIONAL LITERATURE IN SOCIAL SCIENCE EDUCATION.
965. APPLIED PROJECT IN SOCIAL SCIENCE EDUCATION.
- 970, INTERNSHIP IN SOCIAL SCIENCE EDUCATION.
971,
972.

Speech Education (ESP)

Head: Ballew. Staff: Rea, Hopkins, Tingle.

(For other courses in Speech Education, see Department of
Speech and Drama, College of Arts and Sciences)

336. TEACHING PROCEDURES IN SECONDARY SPEECH.
345. SEPTEMBER SCHOOL PRACTICUM IN SECONDARY SPEECH.

- 346. STUDENT TEACHING IN SECONDARY SPEECH.
- 347,
- 348.
- 400. PROBLEM IN SECONDARY SPEECH.
- 505. PROBLEMS OF TEACHING SECONDARY SPEECH.
- 530. (SPEECH). PLAY PRODUCTION FOR THE HIGH SCHOOL TEACHER.
- 591. (SPEECH). TEACHING OF SPEECH AND DRAMA.
- 592. (SPEECH). CREATIVE DRAMATICS FOR CHILDREN.
- 593. (SPEECH). SPEECH FOR THE ELEMENTARY SCHOOL.
- 899. RESEARCH SEMINAR IN SPEECH EDUCATION.
- 900. CURRICULUM IN SPEECH EDUCATION.
- 930. THESIS IN SPEECH EDUCATION.
- 960. RESEARCH IN SPEECH EDUCATION.
- 961,
- 962.
- 963. CRITIQUE OF LITERATURE IN SPEECH EDUCATION.
- 965. APPLIED PROJECT IN SPEECH EDUCATION.
- 970. INTERNSHIP IN SPEECH EDUCATION.
- 971,
- 972.

Student Teaching (EST)

Head: Dickerson. Staff: Ahnell, Briscoe.

- 345. SEPTEMBER SCHOOL PRACTICUM—SECTIONED BY TEACHING FIELD.
- 346. STUDENT TEACHING—SECTIONED BY TEACHING FIELD.
- 347,
- 348.
- 500. CURRICULUM, MATERIALS, AND METHODS: ELEMENTARY STUDENT TEACHING. 10 hours. Prereq: EDU 304, 335, 336 or the equivalent, one year of full-time teaching, and need credit for student teaching for certification. Not open to students following the regular program for certification. Problems of curriculum, materials, and methods for experienced teachers in lieu of regular student teaching. Sectioned by teaching field. Offered only in the first six-week session of the summer quarter.
- 501. CURRICULUM, MATERIALS, AND METHODS: JUNIOR HIGH STUDENT TEACHING. 10 hours.
- 502. CURRICULUM, MATERIALS, AND METHODS: SECONDARY STUDENT TEACHING. 10 hours.

510. FUNDAMENTALS OF THE SUPERVISION OF STUDENT TEACHING.
Prereq: Limited to supervising student teacher personnel.
Introduction to the theory, principles, and practices in the supervision of student teaching and other professional laboratory experiences.
511. INTERNSHIP IN THE SUPERVISION OF STUDENT TEACHING.
Prereq: EDU 561 and consent of the instructor.
A study-work program; directed supervision of student teaching.
512. INVESTIGATION IN THE SUPERVISION OF STUDENT TEACHING.
Prereq: EDU 510 and 511 and consent of the instructor.
An advanced course in the supervision of student teaching, emphasizing research in problems of student teaching.
970. INTERNSHIP IN TEACHING.
971,
972.

Trade & Industrial Education (ETI)

Head: Armstrong. Staff: Racster.

(For other graduate courses in Trade and Industrial Education,
see Vocational Education.)

335. BASIC CURRICULUM IN TRADE AND INDUSTRIAL EDUCATION.
336. TEACHING PROCEDURES IN TRADE AND INDUSTRIAL EDUCATION.
346. STUDENT TEACHING IN TRADE AND INDUSTRIAL EDUCATION.
347,
348.
349. SEMINAR IN TRADE AND INDUSTRIAL EDUCATION. 3 hours.
500. OCCUPATIONAL ANALYSIS.
Techniques in analyzing occupations and jobs within an occupation for instructional content.
501. PRINCIPLES AND PRACTICES IN TEACHING INDUSTRIAL SUBJECTS.
Principles and practices of teaching manipulative skills and related technology: organization of subject matter, lesson planning and student appraisal.
502. CURRICULUM PLANNING FOR TRADE AND INDUSTRIAL SUBJECTS.
Principles and procedures in the development of curricula for trade and technical courses.
503. INSTRUCTIONAL DEVELOPMENT OF TRADE AND INDUSTRIAL SUBJECTS. Prereq: ETI 502.
Development of courses of study, course outlines, instructional material, and organization of course content.
504. SCHOOL SHOP EQUIPMENT AND MANAGEMENT.
Principles involved in the physical planning of school shops and laboratories; selection of tools and equipment.

505. HISTORY AND POLICIES OF TRADE AND INDUSTRIAL EDUCATION.
History of trade and industrial education; contributions of vocational educators; and principles and laws under which programs operate.
506. ADMINISTRATION AND SUPERVISION OF TRADE AND TECHNICAL PROGRAMS.
Administrative and supervisory techniques of trade and technical programs as related to recent legislation.
507. COORDINATION OF DIVERSIFIED COOPERATIVE TRAINING.
Major responsibilities and activities of the Diversified Cooperative Training Coordinator.
508. DIVERSIFIED COOPERATIVE TRAINING PROGRAM DEVELOPMENT.
Analysis of community training needs; relations between school, community and industry; and organization of adult programs.
509. SELECTION AND UTILIZATION OF INSTRUCTIONAL MATERIAL FOR COOPERATIVE PROGRAMS. Prereq: EDU 544.
Selection, organization and application of source material for general and direct related study in part-time cooperative classes.
510. PROBLEMS IN TRADE AND INDUSTRIAL EDUCATION.
Specialized training appropriate to the needs of the individual.

Vocational Education (EVO)

Chairman: Tolbert.

Agricultural Education—Head: Tolbert. Staff: Duncan, O'Kelley.

Distributive Education—Head: Cheshire. Staff: Brown.

Home Economics Education—Head: Cross. Staff: Beall, Boyd.

Trade and Industrial Education—Head: Armstrong. Staff: Racster.

899. RESEARCH SEMINAR IN VOCATIONAL EDUCATION.
900. CURRICULUM PLANNING IN VOCATIONAL EDUCATION.
901. TEACHING PROCEDURES IN VOCATIONAL EDUCATION.
902. EVALUATION IN VOCATIONAL EDUCATION.
903. SUPERVISION OF VOCATIONAL TEACHING.
904. PROBLEMS IN VOCATIONAL EDUCATION.
906. METHODS AND MATERIALS FOR YOUTH ORGANIZATIONS IN VOCATIONAL EDUCATION.
907. ADULT VOCATIONAL EDUCATION.
930. THESIS IN VOCATIONAL EDUCATION.
960. RESEARCH IN VOCATIONAL EDUCATION.
- 961.
- 962.
963. CRITIQUE OF LITERATURE IN VOCATIONAL EDUCATION.

965. APPLIED PROJECT IN VOCATIONAL EDUCATION.

970, INTERNSHIP IN VOCATIONAL EDUCATION.

971,

972.

980, PRACTICUM IN VOCATIONAL EDUCATION.

981,

982.

PROGRAM FOR EXCEPTIONAL CHILDREN

Chairman: Stanley H. Ainsworth, Ph.D.

Staff: Exceptional Children (Mental Retardation, Motor Handicaps, and Emotional Disturbance): (EXC) Blake, Scott, Shotick, Wood, Hogenson, Day, Williams, C. Speech Pathology and Audiology: (SPA) Ainsworth, Blue, McCoy, Ferrier, Kools, Neal, Bailey, Smith, Muma.

Exceptional Children Courses - General (EXC)

500. INTRODUCTION TO EXCEPTIONAL CHILDREN. Prereq: Four courses in education including Education 304.

Nature, cause, and treatment of children's disabilities and their influence on emotional, social, education, and vocational adjustment. Special services required for exceptional children to develop to the maximum capacities.

501. CLINICAL PROBLEMS IN TEACHING EXCEPTIONAL CHILDREN. Prereq: EXC 500.

Study of standardized and informal procedures for use with children with mental retardation, sensory, physical or other disturbances affecting learning. Experience in diagnostic and tutorial techniques and in formal reporting.

899. SEMINAR IN EXCEPTIONAL CHILDREN.

901. PROBLEMS OF THE MULTIPLE HANDICAPPED.

930. THESIS IN EXCEPTIONAL CHILDREN.

941. COORDINATION OF PROGRAMS FOR EXCEPTIONAL CHILDREN.

960, RESEARCH IN EXCEPTIONAL CHILDREN.

961,

962.

963. CRITIQUE OF LITERATURE IN EXCEPTIONAL CHILDREN.

965. APPLIED PROJECT IN EXCEPTIONAL CHILDREN.

987, INTERNSHIP IN COORDINATION OF SPECIAL EDUCATION

988, PROGRAMS.

989.

990, INTERNSHIP IN STATE SUPERVISION OF SPECIAL EDUCATION

991, PROGRAMS.

992.

993. INTERNSHIP: COLLEGE TEACHING IN EXCEPTIONAL CHILDREN.

994. INTERNSHIP: SUPERVISION OF TEACHERS OF EXCEPTIONAL
 995. CHILDREN.
 996.

Mental Retardation (EXC)

505. NATURE OF MENTAL RETARDATION. Prereq: Education 304, EXC 500, plus three additional courses in education.
 Description of types, nature, and causes of mental retardation and implications for adjustment and education. Problems of parental adjustment, diagnosis, treatment and educational modifications.
506. MATERIALS AND METHODS OF TEACHING SKILL SUBJECTS TO THE MENTALLY RETARDED. Prereq: Four courses in education plus EXC 500 and 505.
 The study, selection and preparation of suitable curricular materials; methods used in teaching the skills which mentally retarded children need.
507. SECONDARY SCHOOL PROGRAMMING FOR THE MENTALLY RETARDED. Prereq: EXC 500 and 505.
 Study will emphasize the needs of the adolescent and young adult mentally retarded: pre-occupational and occupational and related experiences, home and family living, civic responsibility, and community living. The relationship of the teacher as a counselor and the utilization of community resources will also be stressed.
508. CURRICULUM FOR THE EDUCABLE MENTALLY RETARDED. Prereq: EXC 500 and 505.
 Study of various curricular approaches to the education of the educable mentally retarded; i.e., subject matter—academic developmental, occupational education. Throughout, curricular programs will be considered in reference to psychological and cultural determinants in the mentally retarded and attainments necessary for adequate function in society.
- 509, PRACTICUM IN TEACHING THE MENTALLY RETARDED.
 510,
 511.
595. (Home Economics) TEACHING THE SEVERELY MENTALLY RETARDED. Prereq: EXC 500, 505, Home Ec. (Psy.) 490.
 This course will consider (1) the growth and development of the severely mentally retarded, (2) programs maintained in public schools, institutions, private agencies, and sheltered workshops to prepare them for optimum functioning with emphasis on family life, mobility, employment, literacy, etc. from both the curricular and methodological aspects of education.
837. ANALYSES OF BASIC RESEARCH: MENTAL RETARDATION.
838. ANALYSES OF PROGRAM AND CLINICAL RESEARCH: MENTAL RETARDATION.
970. INTERNSHIP IN PUBLIC SCHOOLS: MENTAL RETARDATION.
 971,
 972.

980, INTERNSHIP IN RESIDENTIAL CENTERS: MENTAL RETARDA-
981, TION.
982.

986. INTERNSHIP IN RESEARCH: MENTAL RETARDATION.

Motor Handicaps (EXC)

515. NATURE AND TREATMENT OF MOTOR HANDICAPS. Prereq: Four courses in education plus EXC 500.

Nature and causes of motor handicaps with emphasis on cerebral palsy. Contributions of various therapies, equipment, and services of physical therapy, occupational therapy, speech correction, and play therapy.

516. EDUCATION OF CHILDREN WITH MOTOR HANDICAPS. Prereq: Four courses in education plus EXC 500 and 515.

The study, selection, and preparation of suitable materials and modifications of methodology to meet the needs of motor handicapped children.

517, PRACTICUM IN TEACHING THE MOTOR HANDICAPPED.
518,
519.

973, INTERNSHIP IN PUBLIC SCHOOL: MOTOR HANDICAPS.
974,
975.

Emotional Disturbance (EXC)

520. EDUCATION OF DISTURBED CHILDREN. Prereq: admission to Graduate standing in Education.

Considers the nature of emotional and social disturbances and effects on learning and educational adjustments. Basic alterations in school program are discussed. Specific course goals implemented by practicum:

1. To recognize characteristics of disturbed children in classrooms.
2. To develop techniques for objectively observing and describing behavior.
3. To be familiar with techniques for modification of behavior and self-concepts.

521. TEACHING PROCEDURES FOR DISTURBED CHILDREN. Prereq: EXC 500, Psy. 623, EXC 520.

Planning and implementing adaptations in the educational programs for disturbed children. Emphasizes intervention techniques and behavior management, educational diagnosis, therapeutic and remedial teaching, and the relationship process.

964. CRITIQUE OF EDUCATIONAL LITERATURE: DISTURBED CHILDREN.

976, INTERNSHIP IN PUBLIC SCHOOLS: DISTURBED CHILDREN.
977,
978.

983. INTERNSHIP IN RESIDENTIAL CENTERS: DISTURBED CHILDREN.
984.
985.

Speech Pathology and Audiology (SPA)

310. (Speech) SURVEY OF SPEECH PROBLEMS.
The introductory course for those majoring in speech correction. Acts as a course for the classroom teacher who wishes to become informed about speech problems and as a course for students majoring in speech-drama. A study of the major etiology, and basic therapy for all types of speech defects, with a concentration on those most commonly found in the classroom.
412. (Speech) PHYSIOLOGICAL BASIS OF SPEECH. Prereq: Speech 209.
A study of the anatomy and physiology of breathing, phonation, resonance, and articulation for speech; a study of the physical phenomena in voice and speech. Advanced practice in transcribing variations of speech into phonetic symbols.
413. PHYSIOLOGICAL BASIS OF HEARING. Prereq: SPC 310.
Anatomy and physiology of outer, middle, and inner ear structures; auditory pathways leading to and including the brain stem; and the primary auditory projection areas in the cortex.
450. (Psychology) LANGUAGE DEVELOPMENT. Prereq: EPY 304 or equivalent and Psy 490.
Processes of reception, integration, and expression of symbolic information; nature and effects of linguistic symbolism on personal development and behavior; and language development norms.
471. (Speech) INTRODUCTION TO EVALUATING HEARING LOSS. Prereq: Speech 412.
The anatomy and basic psychophysics of hearing, the pathologies causing hearing loss, and basic theory of hearing evaluations. A survey of educational, psychological and medical rehabilitation for persons with a loss. Practice in pure tone audiometry.
474. (Speech) ARTICULATORY DISORDERS OF SPEECH. Prereq: Speech 470.
Etiology, rationale and methods of therapy for functional and organic disorders of voice and articulation. Development of a therapeutic program and lesson plans. Supervised clinical practice with individuals and groups.
475. (Speech) VOICE DISORDERS. Prereq: SPC 470.
Pitch, loudness, and quality disorders of voice due to functional causes. Etiologies and therapies with supervised laboratory experience.
476. (Speech) STUTTERING: ETIOLOGY AND THERAPY. Prereq: Speech 470.
Major theories of causation of stuttering, whether based in neurophysiological, emotional, or learning factors. The development of an integrated therapy based on modern research. Supervised clinical practice in individual and group therapy.

477. (Speech) MEASUREMENT OF HEARING. Prereq: Speech 310, 471.
Rationale and procedure for measuring aspects of hearing, including simple and complex stimuli, threshold and supra-threshold measurements, and pure tone and speech audiometric measures.
- 515, PRACTICUM IN SPEECH PATHOLOGY AND AUDIOLOGY.
516,
517.
534. CLASSROOM PROBLEMS IN SPEECH CORRECTION (Atlanta Area Teacher Education Service only). Prereq: Four courses in education.
Problems of defective speech, common etiologies, identification of speech defects, and the role of the teacher in referral, examination and correction. Clinical demonstrations in cooperation with the Atlanta Speech School.
537. (Speech) SEMINAR IN SPEECH PATHOLOGY. Prereq: Six courses in speech correction or four courses and consent of the instructor.
Intensive exploration of the research and theory in one or more areas of speech pathology. Specific content adapted to the needs of the students. Group projects in addition to reading and lectures.
538. PROGRAM ADMINISTRATION AND CLINICAL PRACTICE IN SPEECH CORRECTION. Prereq: Speech 470 and one content-clinical practice course in speech correction.
Methods for finding, selecting and scheduling speech cases in the public schools. The organizational and administrative problems in keeping records, reporting, and coordinating speech correction activities. Supervised clinical practice.
575. (Speech) DIRECTED INDIVIDUAL STUDY IN SPEECH CORRECTION. Prereq: Four courses in speech correction.
Adaptation of the speech correction curriculum to the individual needs of mature students. A detailed outline of requirements must be prepared in conference by the student and instructor and approved by the Chairman of Speech Correction.
576. (Speech) DIRECTED INDIVIDUAL STUDY IN SPEECH CORRECTION. Prereq: Four courses in speech correction.
Continuation of Education 535, but content must be different.
578. (Speech) SPEECH READING AND AUDITORY TRAINING. Prereq: Speech 471.
Processes and problems of oral communication by the hearing handicapped; procedures for improving communication by means of speech reading and auditory training; supervised clinical practice in individual and group therapy.
670. (Speech) DIAGNOSIS IN SPEECH CORRECTION. Prereq: Speech 310 and Speech 412.
The theory, administration, and interpretation of tests and diagnostic procedures used in determining the nature, etiology of and therapy for speech defects. In addition to various methods for analyzing speech, attention is given to non-audiometric evaluation of hearing; examination of speech mechanism, special abilities related to speech, and to an understanding of how results of psychological tests are related to speech problems.

739. ADVANCED CLINICAL PRACTICE IN SPEECH CORRECTION. Prereq: Six courses in speech correction and 200 clock hours of supervised clinic practice.
Work with complex and difficult problems of speech combined with intensive readings, conferences, and discussions.
817. (Psychology) THEORIES OF LANGUAGE DEVELOPMENT AND DISORDERS.
836. (Psychology) (Speech) ANATOMY AND PSYCHOPHYSICS FOR SPEECH CORRECTION.
872. (Speech) ORGANIC DISORDERS OF SPEECH: CLEFT PALATE.
873. (Speech) ORGANIC DISORDERS OF SPEECH: VOICE.
874. (Speech) ORGANIC DISORDERS OF SPEECH: CEREBRAL PALSY.
875. (Speech) ORGANIC DISORDERS OF SPEECH: APHASIA.
899. SEMINAR IN SPEECH PATHOLOGY AND AUDIOLOGY.
930. THESIS IN SPEECH PATHOLOGY AND AUDIOLOGY.
960. RESEARCH IN SPEECH PATHOLOGY AND AUDIOLOGY.
961,
962.
965. APPLIED PROJECT IN SPEECH PATHOLOGY AND AUDIOLOGY.
970. INTERNSHIP IN PUBLIC SCHOOLS: SPEECH PATHOLOGY AND
971, AUDIOLOGY.
972.
973. INTERNSHIP IN INSTITUTIONS: SPEECH PATHOLOGY AND
974, AUDIOLOGY.
975.
976. INTERNSHIP IN CLINICAL CENTERS: SPEECH PATHOLOGY AND
977, AUDIOLOGY.
978.
979. INTERNSHIP IN RESEARCH: SPEECH PATHOLOGY AND AUDIOLOGY.

HEALTH, PHYSICAL EDUCATION, RECREATION AND SAFETY EDUCATION

Chairman: E. B. Smith

Men's Department—Head: Smith. Staff: Bowen, Bowers, Castronis, Champlin, Clemence, Cole, Cunningham, Detullio, Eaton, Fales, Gabrielsen, Lawson, Min, Mrvos, Towns, Whatley, Williams.

Women's Department—Head: Lewis. Staff: Chritzberg, Keaster, Klein, Knowles, Kuykendoll, Piehler, Russell, Soares, Soule, Stanley, Vincent, Washington.

Physical Education (PED)

1 - 2. PHYSICAL EDUCATION. 1 hour credit each quarter.

Women. Three hours a week for six quarters.

Women students may select activities which best meet their special needs and interests, based upon their health, organic fitness and previous experience in physical education.

Men. Two hours a week for six quarters.

Minimum physical fitness standards must be met during the freshman year as determined by physical fitness test. A swimming test will be administered at the start of the fall quarter. Activities are selected on the basis of student interest, needs and previous physical education experiences.

1x - 2x. PHYSICAL EDUCATION (Majors, men) 1 hour credit each quarter. Three hours a week for six quarters. (Laboratory period to be arranged).

These courses parallel Physical Education 1-2. Designed for Physical Education and Recreation Majors as introductory courses to Physical Education 180, 181, 182 and Physical Education 280, 281, 282.

180, (M). SKILL TECHNIQUES FOR MEN. (3 hours a quarter. Four periods 181, a week required).

182, Demonstrations and practices in teaching methods and techniques in such
183. activities as: tumbling, vaulting, pyramids and trampoline; swimming, water safety and aquatic activities; golf, tennis.

280, (M). SKILL TECHNIQUES FOR MEN. (3 hours a quarter. Four periods 281, a week required).

282, Demonstration and practice in teaching methods and techniques in such
283. activities as badminton and volleyball; gymnastics, wrestling, and weight training.

280, (W). PHYSICAL EDUCATION ACTIVITIES. (3 hours a quarter). (Labo- 281, ratory period to be arranged). Prereq: One quarter in activity engaged in or 282. permission of instructor.

These courses aim to develop knowledges, understandings, skills, and teaching techniques and methods in the basic activities appropriate to the teacher of Movement Education and Physical Education.

211. FUNDAMENTAL MOTOR SKILLS. 3 hours.

Methods and techniques in movement skills. Opportunities are provided for experiences conducting these physical education activities. Knowledge of resource materials. Analysis and teaching of rhythmical activities.

215. AQUATICS. 3 hours. Prereq: Intermediate swimming or the consent of the instructor.

Prepares students for the American Red Cross Instructor's Water Safety Course, for conducting swimming meets, and for presenting water shows. Recommended to students who are interested in camping activities.

257. INTERMEDIATE COMPOSITION. 3 hours.

Study of fundamentals of composition and production. Individual and group problems.

307. PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL. Prereq: Education 304.
Designed to help the teacher understand the place of Physical Education in the elementary school program and its contribution to the developing child. Experience is given in planning, teaching, and evaluating physical educational activities.
335. BASIC CURRICULUM IN PHYSICAL EDUCATION.
336. TEACHING PROCEDURES IN PHYSICAL EDUCATION.
345. SEPTEMBER PRACTICUM IN PHYSICAL EDUCATION.
346. STUDENT TEACHING IN PHYSICAL EDUCATION.
- 347.
- 348.
360. KINESIOLOGY. Prereq: Zoology 312.
Analysis and application of the physical and physiological principles involved in human motion. Physical laws governing the manipulation of objects in sports.
361. THERAPEUTICS OF EXERCISE. Prereq: Physical Education 360.
The techniques of appraisal and guidance of pupils with faulty body mechanics, orthopedic defects and other atypical conditions. Practice is given in the therapeutic use of exercise, massage, relaxation, and other physical modalities.
372. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION.
A survey of the history and study of principles and trends in health, physical education and recreation, professional organizations, literature, and outstanding programs.
376. ORGANIZATION AND ADMINISTRATION. (Same as Education 336.3).
Deals with the organization and administration of physical education and recreation programs in the school. Planning the curriculum in physical education as a part of the total school program.
380. TEAM SPORTS FOR WOMEN. (3 hours a quarter). (Laboratory period to
381, be arranged). Prereq: One quarter of each sport or consent of the instructor.
382. Teaching, coaching, and officiating methods of volleyball, basketball, and softball. Actual experience in teaching in class and officiating in intramural games. The Women's National Official Rating Examination will be given in volleyball and basketball.
379. THEORY, COACHING METHODS AND OFFICIATING OF MAJOR
380, SPORTS. (3 hours each quarter). (Laboratory period to be arranged). Prereq:
381, Senior division standing.
382. Theory and coaching techniques of major sports including football, basketball, baseball, and track. Various coaching systems, stressing their strong and weak points, the study of the various positions of the teams, as well as scheduling, transportation, diets, publicity, and other administrative problems are covered. Participation in planning of University Intramural Sports program, as well as officiating in the various sports, will be included.

383. EVALUATION AND MEASUREMENTS. 3 hours.
Methods in evaluating and testing physical education activities; procedures to be used in evaluating these tests and their results, including statistical analysis.
513. ADMINISTRATION OF PHYSICAL EDUCATION IN THE SCHOOL PROGRAM. Prereq: Four courses in education.
Curriculum planning; budgeting; selection, care, and maintenance of equipment and facilities; personnel and other administrative problems; and evaluation of physical education in the school program.
514. CURRENT PROBLEMS IN HEALTH, PHYSICAL EDUCATION AND RECREATION. Stegeman Hall. Prereq: Four courses in education.
Problems met in a comprehensive program of health, physical education, or in recreation in the school and community. Special emphasis given to problems in areas of student's special interests.
515. RESEARCH METHODS IN HEALTH, PHYSICAL EDUCATION AND RECREATION. Stegeman Hall. Prereq: Four courses in education.
The application of research methods to physical education with experience in developing techniques of gathering, analyzing, and reporting data.
901. FOUNDATIONS IN HEALTH AND PHYSICAL EDUCATION.
904. SCIENTIFIC ASPECTS OF EXERCISE.
906. ANALYSIS OF MOTOR SKILLS.
916. CASE STUDIES IN PHYSICAL EDUCATION AND ATHLETICS.

Health Education (HED)

119. FIRST AID. 3 hours. Problems and practical applications in first aid. Students who qualify receive American Red Cross instructors certificate.
171. PERSONAL AND COMMUNITY HEALTH PROBLEMS. 3 hours. Current information in the areas of personal and community health as these apply to healthful living for individuals and groups.
309. CARE AND PREVENTION OF ATHLETIC INJURIES. 3 hours. Analysis of common athletic injuries, conditioning and safety practices, and taping and bandaging.
344. PROBLEMS IN SCHOOL HEALTH EDUCATION. 3 hours. One double laboratory period. Principles, materials, and methods of school health education. Teachers role in securing a healthful environment, health appraisal, guidance, and instruction.
370. SCHOOL HEALTH EDUCATION. (Same as Education 335.3).
Techniques in recognizing health needs and interests of people in relation to their environment. Pupil experiences and materials to meet these needs. Integrating classroom health activities with health resources in the community.
511. ADMINISTRATION OF HEALTH EDUCATION IN SCHOOL AND COMMUNITY. Prereq: Four courses in Education. Analysis of problems in health education as they pertain to children in school and out of school,

and to adults; the place of the classroom teacher and the school administrator in the health program. Opportunity for independent study.

521. **THE EFFECTS OF ALCOHOL.** 5 to 10 hours.
Social, moral, psychological, and physiological effects of beverage alcohol use on the individual, family and community.

Park and Recreation Administration (REC)

118. **SOCIAL RECREATION.** 3 hours. Methods and materials in social recreation. Experience will be given in group planning and conducting social activities. Some laboratory experience will be required.
203. **INTRODUCTION TO PARK AND RECREATION ADMINISTRATION.** 3 hours. History, development, trends, and social role of recreation in modern society.
346. **PRACTICUM IN RECREATION.** 5 hours each.
347. Recreation majors are placed in selected recreation centers for an entire quarter, during which time they are supervised in recreation activities.
348. **INTERPRETATION OF RECREATION.** 3 hours. Designed to familiarize the students with the recreation profession and the philosophy of recreation. A survey is made of the entire field of recreation. A study of national organizations is included.
385. **PROBLEMS IN RECREATION.** 3 hours.
Consideration of needs and problems in recreation in rural areas, hospitals, and armed forces.
386. **CAMP COUNSELING.** 3 hours.
Designed to give prospective camp counselors an understanding of the total camp program, duties and responsibilities of camp counselors. Techniques of camp leadership will be considered.
387. **ORGANIZATION AND ADMINISTRATION OF RECREATION.** Study and evaluation of the organization and administration of recreation programs.
388. **YOUTH SERVING AGENCIES.** Objectives, organization, program and membership of principal national youth membership agencies. A discussion of professional opportunities in these agencies will be explored.
389. **SEMINAR IN RECREATION.** Prereq: Senior class standing. Discussion of the current aspects of the field of Recreation as a profession. Trends and problems which are of concern to graduating Recreation majors.
390. **SUPERVISION OF COMMUNITY CENTERS AND PLAYGROUNDS.** This course covers the varied aspects of the community center and playgrounds operation; stresses leadership techniques; outlines programs and considers problems relating to the planning and operation of these programs.
512. **PROBLEMS IN SCHOOL AND COMMUNITY RECREATION.** Prereq: Four courses in education. Problems of school and community recreation pertaining to philosophy, program, facilities and leadership. This course will consider the school camp program.

530. CAMPING ADMINISTRATION. Prereq: Recreation 386. Organization, administration, staffing, and program planning for different types of camps.
531. OUTDOOR RECREATION. The organization and administration of recreation programs in large park areas and forests.
532. THE ROLE OF GOVERNMENT IN PARKS AND RECREATION. National and state government park and recreation policies and their impact on community recreation programs.
534. PUBLIC RECREATION ADMINISTRATION. Prereq: Recreation 512. Methods of organizing and administering recreation departments at the local level.
535. PARK MANAGEMENT AND OPERATION. Prereq: Recreation 534. Management, operation and physical maintenance of park and recreation areas and facilities.
536. INTRODUCTION TO RECREATION FOR THE ILL AND HANDICAPPED. Prereq: EXC 500 or consent of instructor. Therapeutic recreation services in the treatment and rehabilitation of persons with physical, emotional, and intellectual disorders.
537. RECREATION FOR THE MENTALLY RETARDED. Prereq: Recreation 736 or EXC 505. The use of music, dance, arts, crafts, sports, and games in working with the mentally retarded.
933. TRENDS IN RECREATION.

Dance Education

- 352, 353. THEORY AND PRACTICE IN MODERN DANCE TECHNIQUE. 3 hours each. Consent of instructor.
Analysis and exploration of the technical aspects of modern dance with emphasis on anatomical structure, muscular activity and movement principles. Theories of movement will be studied. Participation and teaching experience in a technique class will be part of the laboratory work.
- 354A-B. DANCE WORKSHOP. 3 hours each. Prereq: Physical Education 257. Projects in choreography, directing, production and performance culminating in public concert presentations.
450. HISTORY OF DANCE FROM PRIMITIVE MAN THROUGH THE RENAISSANCE.
A study of the forms of dance both as a reflection of cultural history and as an art form from primitive times through the Renaissance.
451. HISTORY OF DANCE FROM THE BAROQUE PERIOD THROUGH THE TWENTIETH CENTURY.
A study of the forms of dance both as a reflection of cultural history and as an art form from the Baroque period through the twentieth century. The contributions of outstanding leaders will be analyzed.
455. READINGS IN DANCE. Prereq: Consent of instructor. 3 hours.
A critical review of literature in the field of dance with emphasis on current research, issues, and problems of dance education.

Safety Education (SED)

- 575. SAFETY EDUCATION.
Problems, policies, principles, and methods involved in accident prevention programs in the school and community.
- 576. PRINCIPLES OF TRAFFIC SAFETY.
Prereq: Admission to teacher education.
Analysis of traffic accidents; attitude factors, essential knowledge of automobile operation, traffic laws and regulations.
- 577. PRACTICES IN DRIVER EDUCATION.
Prereq: Admission to teacher education.
Administration and teaching of driver and traffic safety on high school level.
- 900. DRIVING RANGE AND SIMULATION IN TRAFFIC EDUCATION.
- 901. SCHOOL TRANSPORTATION AND SAFETY.
- 902. (Sociology) BEHAVIORAL FACTORS IN TRAFFIC EDUCATION.

School of Forestry

- 191. FIELDS OF FORESTRY. 1 hour.
Orientation to the scope of the profession and its practice from biological, economic, and socio-political viewpoints.
- 192. DEVELOPMENT OF FORESTRY. 1 hour.
Historical development of forestry in America.
- 193. FORESTRY CALCULATIONS. 1 hour.
Mathematical and graphic solutions of elementary problems.
- 201. DENDROLOGY: HARDWOODS. 3 hours. Two 3-hour lecture-laboratory periods. Prereq: Ten hours of botany.
Identification, classification, silvical requirements, and distribution of the more important forest trees among the Angiosperms.
- 202. DENDROLOGY: CONIFERS. 3 hours. Two 3-hour lecture-laboratory periods. Prereq: Ten hours of botany.
Identification, classification, silvical requirements, and distribution of the more important forest trees among the Gymnosperms.
- 203. FOREST ECOLOGY. 3 hours. Prereq: Ten hours of botany.
Fundamental principles of forest physiology and ecology; effects of the various factors of site upon the characteristics of growth and development of forest stands; forest classification.
- 301. SILVICULTURAL PRACTICES. Prereq: Forestry 203, Agronomy 210.
Theory and techniques of controlling establishment, composition, and growth of forest stands; cultural treatments including cutting, use of fire and silvicides.
- 321. WOOD ANATOMY AND IDENTIFICATION. 3 hours. Three laboratory periods. Prereq: Forestry 201, 202.
Anatomical features of wood and wood identification by gross and minute structure.

325. SEASONING AND PRESERVATION. 2 hours. Prereq: Forestry 321.
Pre-drying, air seasoning and kiln drying; preservative treatment.
344. FOREST MEASUREMENTS. Prereq: Mathematics 101, Agricultural Engineering 210.
Field measurements of trees, major forest products and timber stands; log scaling; timber cruising; growth studies; and preparation of stand and stock tables.
351. WATERSHED MANAGEMENT. 2 hours.
A survey of forest water relations and how forest and associated lands are managed for water quality, supply and erosion control.
355. FOREST RECREATION. 2 hours.
The place of forest recreation in the multiple-use concept.
361. GAME MANAGEMENT. 3 hours. Prereq: Botany 375 or Forestry 203.
Wild game as a forest resource. The interrelations of game management with other resource use. Game management policy and administration.
362. FOREST RANGE MANAGEMENT. 3 hours. Prereq: Botany 122 and Forestry 203.
Principles of range management involving use of forest range as a resource; improvement of forest range; ecology of forest range plants.
382. (ENTOMOLOGY) FOREST PROTECTION: Three lectures and two laboratory periods. Prereq: Forestry 201, 202.
Biology, identification, and control of the species of insects destructive to American forests.
383. (PLANT PATHOLOGY) FOREST PROTECTION: Pathology. 3 hours.
Three laboratory periods. Prereq: Botany 121, 122.
An introduction to the diseases of forest trees; identification and control.
384. FOREST PROTECTION: Fire. Prereq: Forestry 203.
Interrelations of environmental and human factors on causes, behavior, and effects of fire. Fundamentals of prevention through understanding of socio-cultural characteristics of forest users. Analytical approach to control of wild-fire and use of prescribed fire.
392. FOREST HISTORY AND POLICY. 2 hours.
Development of forestry and forest legislation leading to the present American forest policies.
394. GENERAL FORESTRY. Four lectures and one laboratory period. Prereq: Junior standing. Not open to forestry students.
Relation of forests to economic strength; renewable vs. non-renewable resources; introduction to forestry practices.
395. FOREST RESOURCES: MANAGEMENT AND UTILIZATION.
Intensive study of public and private forestry operations and utilization enterprises.
401. (BOTANY) PHYSIOLOGY OF WOODY PLANTS. Three lectures and two double laboratory periods. Prereq: Botany 380, Forestry 203, or Horticulture 308.
Special topics in water relations, nutrition, photosynthesis, shoot and root development, dormancy, cambial activity, and reproduction in woody plants.

402. **FOREST SOILS.** Three lectures and two laboratory periods. Prereq: Agronomy 210, Forestry 203.
Morphological, physical, and chemical properties of soils in relation to growth of forest trees; classification of soil profiles and site index; appraisal of soil conditions on forest properties.
403. **FOREST TREE IMPROVEMENT.** 3 hours. Two lectures and one laboratory period. Prereq: Forestry 301.
The genetic inference in forest tree improvement; breeding and progeny testing; quality seed production; vegetable propagation.
404. **(GEOGRAPHY) WATERSHED HYDROLOGY.** Three lectures and two laboratory periods. Prereq: Physics 127, 128 and Geography 122.
General hydrology as based on the hydrologic cycle, with emphasis on the role of soils, vegetation, physiography and the microclimate on processes of precipitation, runoff, erosion and landforming. Problems of measurement and regulation of streamflow, groundwater, soil moisture and precipitation.
421. **PHYSICAL PROPERTIES OF WOOD.** 2 hours. Two laboratory periods. Prereq: Forestry 321.
The physical nature of wood, including moisture, heat, light, sound, and electrical relations.
422. **MECHANICAL PROPERTIES OF WOOD.** 3 hours. Two lectures and one laboratory period. Prereq: Forestry 321.
Strength and other characteristics of commercial woods as related to growth and utilization; examination of standard testing procedures.
449. **ANALYTICAL METHODS IN FOREST MANAGEMENT.** 3 hours. Prereq: Mathematics 254, 255.
Selected techniques for mathematically describing and optimizing the operation of forestry enterprises; construction of mathematical models, linear programming, computer simulation, and decision theory.
471. **ECONOMIC ANALYSIS IN FORESTRY.** 3 hours. Prereq: Forestry 572.
Current economic theory as a tool in the analysis of problems in forest production, utilization, and distribution.
481. **FOREST FIRE BEHAVIOR AND USE.** 3 hours. Prereq: Forestry 384 and ten hours of physics.
Ignition, combustion, heat transfer, the convection column, living and dead fuels, fire weather and climatology, danger ratings. Prescribed burning techniques and effects.
501. **FOREST INFLUENCES.** 2 hours. Prereq: Agronomy 210 and Forestry 203.
Influence of forests on climate, soil, streamflow, erosion, water conservation, and site productivity.
503. **REFORESTRATION.** 3 hours. Two lectures and one laboratory period. Prereq: Agronomy 210 and Forestry 203.
Fundamentals and practices involved in artificial regeneration. Seed production, collection, extraction, testing, and storage; nursery management; site preparation; direct seeding, and planting.
504. **PRINCIPLES OF MICRO-MEASUREMENTS.** 2 hours. Two laboratory periods. Prereq: Forestry 321.

Microtechniques used in the study of wood elements, characteristics, and behavior.

507. REGIONAL SILVICULTURE. 3 hours. Prereq: Forestry 301.
Application of silvicultural methods in the forest regions of the United States.
525. HARVESTING FOREST PRODUCTS. 2 hours. Prereq: Forestry 301, 344, 395.
Equipment, methods, and transportation; cost analyses.
526. NAVAL STORES. 2 hours. Prereq: Forestry 301, 321.
History, economics, chemistry, and processing of naval stores; physiology of oleoresin synthesis; field practices of gum naval stores industry.
527. FOREST PRODUCTS. 2 hours. Prereq: Forestry 321.
Technology, manufacture, and use of forest products.
541. TIMBER MANAGEMENT: FOUNDATIONS. Prereq: Forestry 301, 547.
Principles of forest regulation. Business and other objectives of management.
542. TIMBER MANAGEMENT: FINANCE. 3 hours. Prereq: Forestry 541.
Valuation of forest land, growing stock, and stumpage; financial alternatives; liquidation vs. sustained yield.
543. FOREST INVENTORY CONTROL. 2 hours. One lecture and one laboratory period. Prereq: Forestry 301, 547.
Field data collection, machine processing, and analysis for continuous control.
544. SILVIMETRIC METHODS. Prereq: Forestry 547.
Application of statistical techniques, graphical mathematics, and empirical formulas to all branches of forestry.
545. FOREST MANAGEMENT PLANS. Prereq: Forestry 301, 547, 541.
Preparation of a management plan for a forest property, including surveying, map making, data collection. Presentation format must meet professional standards.
546. ADVANCED AERIAL PHOTO INTERPRETATION. (Same as Ggy. 422.)
Five 2-hour laboratory periods. Prereq: Geography 420 or equivalent.
Laboratory instruction on individualized photogrammetric problems related to the major interests of the students. Mastery of advanced photogrammetric instruments.
547. FOREST MENSURATION. 4 hours. Two lectures and two laboratory periods. Prereq: Forestry 344 and Statistics 200.
Volume determination of major forest products, trees, and stands; stand density analysis; growth and yield studies; sampling methods; graphical and statistical analysis.
548. TIMBER EVALUATION. 2 hours. Prereq: Forestry 547.
Timber appraisal; stumpage equality evaluation; damage appraisal.
549. FOREST PRODUCTS LAW. Prereq: Senior class standing.
A study of the legal aspects of forest management, with emphasis on legal terminology, and the existing law regarding trees and their products as property. This course is in no sense designed, nor should it be inferred, as being a course in instruction in law as would be taught in a School of Law.

556. **FOREST MANAGEMENT FOR RECREATION.** 3 hours. Prereq: Forestry 355, Psychology 101, Sociology 105.
Basic methods of manipulating the forest resources for optimum recreation benefits.
557. **FOREST RECREATION AREA DEVELOPMENT.** Prereq: Forestry 355, 556.
Development and management of forest recreation facilities.
561. **WILDLIFE MANAGEMENT TECHNIQUES.** 3 hours. Two lectures and one laboratory period. Prereq: Forestry 361 or Zoology 353.
Field and laboratory techniques commonly required of professional wildlife workers.
562. **ADVANCED PRINCIPLES OF WILDLIFE MANAGEMENT.** Prereq: Forestry 561 or permission of instructor.
Application of the principles of animal and plant ecology to the biological basis of wildlife management and its coordination with other land uses on upland and wetland habitats.
566. **MANAGEMENT OF THE FISHERY RESOURCE.** Three lectures and two double laboratory periods. Prereq: Forestry 361, Zoology 350.
Application of principles concerning the dynamics of fish populations, environment, conservation, and usage by man.
567. **MARINE FISHERIES.** Prereq: Forestry 361, Zoology 350.
A survey of marine fisheries of the United States. Brief consideration will be given to each of the following aspects of the marine fisheries; general biology of the species, types of fishing gear employed in their capture, population dynamics, and economic importance of the fishery.
571. **MARKETING FOREST PRODUCTS.** 2 hours. Prereq: Forestry 572.
Economics of marketing forest products; analysis of cooperatives; techniques for improving marketing efficiency.
572. **ECONOMICS OF FORESTRY.** 3 hours. Prereq: Agricultural Economics 310 or equivalent.
Demand for forest products and services; economics of production, utilization, and distribution; forest taxation and insurance; social aspects of forestry.
573. **FORESTRY PRODUCTION ECONOMICS.** 2 hours. Prereq: Forestry 572.
Economic factors involved in management decisions with respect to uses of land, labor, and capital; input-output relationships; determination of profits.
591. **FOREST ADMINISTRATION.** 3 hours. Prereq: 20 hours of forestry courses.
Problems, policies and procedures applicable to administration of personnel; human relations; supervisory techniques; professional ethics.
592. **OPERATIONAL PROBLEMS IN FOREST MANAGEMENT.** Prereq: 20 hours of forestry courses with C+ average or better.
Problems associated with present-day forestry enterprises. Specific operational problems will be presented and analyzed by specialists from industry and government. The case method will be used.
594. **PRINCIPLES AND PRACTICES OF FORESTRY.** Four lectures and one laboratory period. Prereq: Forestry 394 or equivalent. Not open to forestry students.
The role of forestry in land use; underlying biological principles and cultural

practices; measuring and marketing forest products; economics of forest investment and management. Oriented toward small forest holdings.

595. INFORMATIONAL METHODS IN FORESTRY. 3 hours. Prereq: 20 hours of forestry courses.

Procedures and techniques for use of various media essential to disseminating forestry information to the public.

598. FORESTRY PROBLEMS. 3 hours. Prereq: Senior standing and a cumulative average of 80.

Assigned or selected problems in the field of forestry. A written report is required. Not open to students having credit in Forestry 599.

599. FORESTRY PROBLEMS. Prereq: Senior standing and a cumulative average of 80.

Assigned or selected problems in the field of forestry. A written report is required. Not open to students having credit in Forestry 598.

800. FORESTRY SEMINAR

- 801, PROBLEMS IN SILVICULTURE

802,

803.

- 821, PROBLEMS IN WOOD TECHNOLOGY AND UTILIZATION

822,

823.

- 841, PROBLEMS IN FOREST MANAGEMENT

842,

843.

- 845, PROBLEMS IN FOREST HYDROLOGY

846.

850. FISHERIES AND WILDLIFE SEMINAR

- 881, PROBLEMS IN FOREST PROTECTION

882.

921. APPLIED RESEARCH IN FORESTRY

930. THESIS

School of Home Economics

Clothing and Textiles

120. CLOTHING SELECTION AND CONSTRUCTION. Two lectures and three double laboratory periods. (Open to non-majors.)

Application of basic principles to selection of commercial patterns, fabrics, and ready-to-wear; fundamental techniques in garment construction; grooming and care of clothes.

223. CLOTHING FOR THE FAMILY. 3 hours. Two lectures and one double laboratory period. Prereq: Home Economics 120 and 224. (Open to non-majors.)

Physiological, psychological, artistic, social, and economic aspects of clothing as related to clothing needs of family members at various stages of the family cycle.

224. **ELEMENTARY TEXTILES.** Two lectures and three double laboratory periods. Prereq: Chemistry 111 or 121. (Open to non-majors.)
Textile fibers, yarns and fabrics, their source, production, manufacture, properties and identification; selection, use and care of modern textiles; special problems; field trips.
321. **ADVANCED CLOTHING SELECTION AND CONSTRUCTION.** Two lectures and three double laboratory periods. Prereq: Home Economics 120, 224 or equivalent, and Art 120.
Advanced dressmaking techniques in handling wool and other types of textile fabrics; clothing based on aesthetic, physical and psychological factors; study of the fashion industry.
360. **ADVANCED TEXTILES.** Two lectures and two 3-hour laboratory periods. Prereq: Home Economics 224 and Chemistry 261 or equivalent.
Advanced study of textiles with emphasis on the newer processes, fibers and finishes; analysis of fibers and fabrics; term problem; field trips.
363. **COSTUME DESIGN.** Three lectures and two double laboratory periods. Prereq: Home Economics 321. With approval of the instructor, may be elected by students majoring in fields other than home economics.
Developing originality and creative ability in designing clothing with consideration of personality, figure type, age and occasion; historic and current fashion influences.
463. **HISTORIC COSTUME.** Prereq: Home Economics 321. (With consent of the instructor open to non-majors.)
A study of historic costume from ancient times to the present; socio-economic, political and religious influences on dress.
561. **CLOTHING AND TEXTILE ECONOMICS.** Prereq: Home Economics 224 or equivalent and 321; Marketing 360; or by consent of instructor.
Organization, functions and interrelations of the various industries concerned with production and distribution of textiles and clothing; consumption of clothing and household textiles; special problems; field trips.
562. **TAILORING.** Two lectures and three double laboratory periods. Prereq: Home Economics 224 or equivalent and 321.
Planning and making a tailored ensemble; techniques employed in custom made garments.
563. **ILLUSTRATIVE MATERIALS IN CLOTHING AND TEXTILES.** Two lectures and three double laboratory periods. Prereq: Home Economics 321 or equivalent and one other approved senior division course in clothing and textiles.
Preparation of illustrative materials on problems related to selection, construction, and care of clothing and textiles. Designed for teachers, home demonstration agents, and other specialized groups.
564. **PATTERN DESIGN AND DRAPING.** Two lectures and three double laboratory periods. Prereq: Home Economics 321 and 562.

Making and using a master pattern in designing garments; designing through draping; emphasis on artistic effects in color, line and texture; application of art principles.

865. CLOTHING AND TEXTILE PROBLEMS

867. CLOTHING AND TEXTILE RESEARCH METHODS

Family Development

293. (SOCIOLOGY) FAMILY RELATIONS.

Designed to assist students in preparation for marriage and family living. Personal development and family living, planning for marriage, achieving a happy marriage.

311b and 312b. NURSERY SCHOOL PRACTICUM. 10 hours. Prereq: Home Economics 395, 492 and 591.

Nursery School teaching experience is provided in the Nursery School.

390. PRENATAL AND INFANT DEVELOPMENT. Four lectures and two periods of supervised observation in the Infant Center.

A study of the adjustment of the young family through pregnancy and childbirth. Special emphasis is given to the physical, mental, emotional, and social development of the child up to two years of age.

395. (PSYCHOLOGY) INTRODUCTION TO CHILD DEVELOPMENT. Three lectures, three periods of observation in the Nursery School and one period of laboratory discussion. Prereq: Psychology 101.

A survey of child development from birth to age six (with emphasis on the years two to six) including physical, social, emotional, and intellectual development.

397. CREATIVE MATERIALS AND ACTIVITIES IN THE HOME. Prereq: Art 120.

Functions of creative materials and activities in the home in developing a closer family unity; types of creative activities which can be carried on in the average home with minimum of special materials, equipment, and expenditure.

408. (PSYCHOLOGY) DEVELOPMENT OF THE YOUNG CHILD. Four lectures and two periods of supervised observation in the Nursery School. Prereq: Home Economics 395.

The physical, mental, emotional, and social development of the preschool child, and the origins of psychological processes; special reference to techniques of guidance.

461. THE FAMILY. (See Sociology.)

492. CHILD GUIDANCE. Three lectures, three periods of supervised observation in the Nursery School and one period of laboratory discussion. Prereq: Home Economics 395 or equivalent.

The guidance of young children as based upon a knowledge of their maturation in the pre-school years. Principles, techniques and facilities for guidance of young children.

493. THE FAMILY IN THE COMMUNITY. Prereq: Psychology 101 or Sociology 105.

Factors affecting family life, including national, state, and local legislation and services, mass media of communication, and programs in churches, schools, and communities.

495. **CONTEMPORARY FAMILY LIFE.** Prereq: Work in child development, or family relations, Sociology 105 or 461.
A study of the changing American family and of the inter-personal relationships of family members at each stage in the family life cycle.
496. **(EDUCATION) PARENT EDUCATION.** Prereq: Home Economics 395.
Working philosophy for parent education; skills in procedure and techniques for working with parents. Opportunity for observation and participation with parent groups, parent conferences, and home visitations.
591. **CREATIVE ACTIVITIES FOR THE PRE-SCHOOL CHILD.** Prereq: Home Economics 395 and one additional related senior division course.
Course covers selected types of creative activities for children of the pre-school years, including literature, art, music, nature study and other materials for young children. Practical experience with these in Nursery School.
594. **NURSERY SCHOOL LABORATORY PROBLEMS.** Four lectures and two periods of supervised practice in the Nursery School. Prereq: Home Economics (Psychology) 395 and one additional related senior division course.
Instruction and observation in the basic principles of group management of children from two through five years; guidance in selection of equipment and play materials; administration and organization of a nursery school; visitation of pre-school centers.
595. **(EXCEPTIONAL CHILDREN) TEACHING THE SEVERELY MENTALLY RETARDED.** Prereq: Exceptional Children 512 and 518; Home Economics (Psychology) 395.
Development of the severely mentally retarded in relation to public and private programs preparing them for optimum functioning with emphasis on family life, mobility, literacy, and employment.
597. **INFANT DEVELOPMENT.**
Emotional, social, intellectual, and physical development in infancy. Supervised observation in Infant Center and in selected homes.
890. **RESEARCH IN FAMILY OR CHILD DEVELOPMENT**
892. **(PSYCHOLOGY) BEHAVIOR PROBLEMS IN CHILDREN**
893. **FAMILY COUNSELING**
894. **SEMINAR IN CHILD DEVELOPMENT**
895. **SEMINAR IN FAMILY DEVELOPMENT**
998. **INTERNSHIP IN NURSERY SCHOOL ADMINISTRATION**
- 999.

Food and Nutrition

115. **FAMILY MEAL PREPARATION AND SERVING.** Three lectures and two two-hour laboratory periods.
Introductory course in foods and nutrition. Relates nutritional needs of family members to the planning, preparation, and service of meals.

304. **NUTRITION EDUCATION FOR TEACHERS.** 3 hours. Prereq: Senior division standing.
A study of the diet habits of Georgia school children and the relation of nutrition to health. Emphasis is placed on how teachers can enrich school and community programs and improve the health of school children through nutrition education.
306. **FOODS.** Three lectures and two laboratory periods. Prereq: Home Economics 115 and Chemistry 261.
Principles of cookery through analysis of basic recipes; the application of principles in preparation of commonly used foods; evaluation of products; some experimentation. Practical examination required.
350. **ADVANCED MEAL PLANNING AND SERVING.** Three lectures and two double laboratory periods. Prereq: Home Economics 115.
Basic information on food selection, buying, and preparation of family meals. Principles of cookery, cost comparisons and meal service are included.
351. **FOUNDATIONS OF NUTRITION.** Two lectures and three double laboratory periods. Prereq: Zoology 101, Chemistry 261 and Home Economics 115.
The requirement of different individuals for energy, protein, minerals, and vitamins; food as a source of daily requirements; and the relation of food and the state of nutrition of an individual to physical fitness.
353. **NUTRITION.** Two lectures and three double laboratory periods. Prereq: Home Economics 306, 351, and Chemistry 451.
The chemical and physical changes involved in the digestion and metabolism of foods. Nutritive value of foods; relative costs of foods; family dietary calculations.
354. **QUANTITY COOKERY.** One lecture and four double laboratory periods. Prereq: Home Economics 306.
A study of cookery methods applicable to the preparation of foods for institutional or quantity service. Provides for use of institutional equipment, determination of food costs, experience in large cafeteria, and the planning and serving of meals.
355. **CATERING.** Informal laboratory, equivalent to two lectures and three double laboratory periods. Prereq: Home Economics 350, 306, or consent of instructor.
The planning, preparing, and serving of teas, luncheons, dinners, and banquets to large groups. Includes entertaining in the home.
357. **FOOD DEMONSTRATION.** 3 hours. Three double laboratory periods. Prereq: Home Economics 306 or 350.
A continuation of Foods 306 or 350. Taught by student demonstrations which illustrate principles of cookery. Major emphasis is on demonstration techniques.
358. **INDIVIDUAL AND FAMILY NUTRITION.** Three lectures and two laboratory periods. Prereq: Home Economics 115.
A study of nutrition needs of the family and its individuals. Includes a study of food costs in relation to nutritive value. Open to all students.
370. **FOOD SELECTION AND BUYING.** 3 hours.
A study of sources, standards and grades, comparative values, and storage of foods for home use.

451. **EVALUATION OF FOODS AND FOOD PRODUCTS.** Four lecture periods and two hours laboratory and field work. Prereq: Home Economics 306 or 350 and 351 or 358.
A study of food products currently used for human consumption in the home and in quantity food service; criteria for evaluating new food items and the effects of new processes on edible quality and nutritive value.
452. **ADVANCED NUTRITION.** Three lectures and two double laboratory periods. Prereq: Home Economics 351 and Chemistry 451 or equivalents.
Digestion and metabolism as related to nutritional status; study and evaluation of low-cost diets. Methods in vitamin assay, blood chemistry and urinalysis.
453. **NUTRITION IN DISEASE.** Prereq: Home Economics 353 or 452.
The modification needed in normal diet for the treatment of various diseases. Special emphasis is given to the study of digestive diseases, diabetes, diseases of the blood and to general malnutrition.
455. **NUTRITION IN INFANCY AND CHILDHOOD.** Prereq: Home Economics 350 and 358 or equivalents.
Fundamental principles of nutrition during infancy and early childhood. Laboratory work in infant laboratory and nursery school.
458. **READINGS IN NUTRITION.** Prereq: Home Economics 351 or equivalent.
Recent developments and the present status of knowledge on selected topics from the field of nutrition. The course is designed specifically for those who wish to bring their knowledge of nutrition up to date.
550. **INTRODUCTION TO EXPERIMENTAL FOODS.** Two lectures and two three-hour laboratory periods. Prereq: Home Economics 306, 351 or equivalents.
Study of physical and chemical properties and changes in foods that influence the quality of foods and food products. Experimental methods used on preparation of gels, jellies, egg products, fruits and vegetables and cereal products.
554. **EXPERIMENTAL FOODS.** Two lectures and two 3-hour laboratory periods. Prereq: Home Economics 306, 351 or equivalents.
Influence of physical and chemical characteristics of meats, batters, doughs and fats on the quality of prepared products.
850. **SEMINAR IN FOODS AND NUTRITION**
854. **SPECIAL TOPICS IN FOODS AND NUTRITION**
857. **INTRODUCTION TO RESEARCH IN FOODS AND NUTRITION**
858. **RESEARCH IN FOODS AND NUTRITION**

Housing and Home Management

175. **HOME DECORATING AND FURNISHING.** Prereq: Art 120.
A basic course in furnishing the home for contemporary living. Students have opportunity to apply design principles in planning furnishings for homes.
343. **SELECTION, USE AND CARE OF HOUSEHOLD EQUIPMENT.** Prereq: Home Economics 115, 175, 224. Two lectures and three double laboratory periods.
A study of household equipment in relation to principles of operation. Basic information about utilities, kitchen and laundry planning and home lighting.

364. **PRINCIPLES OF FAMILY ECONOMICS.** Prereq: Economics 105.
Changes in economic requirements during the family life cycle; forces affecting the economic welfare of families in this country; management of family financial resources; relationships between level of family living and the national economy.
368. **HOME MANAGEMENT.** 3 hours. Three lectures. Prereq: Home Economics 343, 306 or 350, 351 or 358.
A study of the management of family resources, time, money and effort as they affect family living. The course parallels 369 but may be taken separately by non-majors.
369. **HOME MANAGEMENT RESIDENCE.** 3 hours. Informal laboratory. Prereq: Home Economics 306 or 350, 351 or 358, 343.
A practical application of the principles involved in 368. The informal laboratory living in a home management house provides opportunity for students to experiment with all phases of homemaking.
376. **HOUSING.** 3 hours. Two lectures and one double laboratory period. Prereq: Home Economics 175, 343, or consent of the instructor.
Present-day family housing needs from the standpoint of health, safety, environment, finance, ownership; types of dwellings; minimum standards.
377. **PRACTICAL HOME FURNISHINGS.** 3 hours. One lecture and two double laboratory periods. Prereq: Home Economics 175.
A course dealing with the refinishing of furniture and construction of furnishings for the home; a study of woods and wood finishes used for furniture; upholstery techniques; making curtains, draperies, and slipcovers.
475. **HOME DECORATING AND FURNISHING.** Three lectures and two double laboratory periods. Prereq: Home Economics 175, 376, or 480 or equivalent; Art 216.
A study of decoration and furnishing in the past and present with applications to contemporary interiors.
476. **DECORATIVE ACCESSORIES FOR THE HOME.** Prereq: Two senior division courses in housing, home furnishings, or interior design.
Historical and cultural development of accessories used in the home including ceramics, metals, and textiles. Design and characteristics of materials in these accessories will be covered.
480. **HOUSING DEVELOPMENTS.** Prereq: Home Economics 175, 343 and a senior division course in social science.
Development of modern housing as related to family welfare: to health, safety, delinquency, social progress. A survey of housing problems; development of legislation; policies and programs; social and economic trends.
546. **HOUSEHOLD EQUIPMENT TESTING.** Prereq: Physics 127 and Home Economics 343.
The operation, care, and installation requirements of equipment; the measurement and testing of factors governing the efficiency of different types of equipment.
547. **HOME LIGHTING AND REFRIGERATION.** Prereq: Home Economics 343.

Application to home situations of recent developments in lighting and in refrigeration principles.

570. **CONSUMER PROBLEMS.** Prereq: Home Economics 368-369.
Problems of the household buyer; intelligent selection of goods on modern market; standards and labeling as safeguards in buying; family income and problems of distribution.
576. **FAMILY FINANCE.** Prereq: Home Economics 364 or equivalent.
Personal and family financial planning. Family values in relation to family income, spending, saving, and investing; effect of the economy on family financial planning; retirement plans and social security; insurance; home ownership and housing.
860. **READING IN FAMILY ECONOMICS**
868. **MANAGEMENT PROBLEMS IN HOMES**
887. **RESEARCH IN FAMILY HOUSING**

Institution Management

372. **INSTITUTION MANAGEMENT.** Prereq: Home Economics 343.
A study of the problems involved in the management and organization of public and private institutions as hospitals, school food departments, and commercial units; selection of material and equipment; planning and placing equipment in food units.
572. **ADVANCED INSTITUTION MANAGEMENT PRACTICE.** Two conferences and two 3-hour laboratory periods. Prereq: Home Economics 372, 354, and 574.
Principles of management and analysis of practices observed in management and operation of institutional food services.
574. **INSTITUTION FOOD PURCHASING.**
A study of storage, net yields, specifications, grading, cost control and distribution of food and food products.
921. **PROBLEMS IN HOME ECONOMICS**
930. **THESIS RESEARCH**

The School of Journalism

100. **JOURNALISTIC PRODUCTION.** 1 to 5 hours. Prereq: Journalism 101 or 350.
Communications work with *Red and Black* and other campus and local publications and organizations, under faculty supervision.
101. **INTRODUCTION TO JOURNALISM.**
A survey of the communications field, including writing therefor.
120. **PRINCIPLES AND ETHICS OF JOURNALISM.**
A study of the fundamentals of journalism, including ethics, practices, and trends.

130. **HISTORY OF JOURNALISM.**
The development of mass media of communications and their place in society, with special reference to the U.S.A.
200. **JOURNALISTIC PRODUCTION.** 1 to 5 hours. Prereq: Permission of the Dean of the School of Journalism.
140. **PUBLIC OPINION AND JOURNALISM.**
The place of mass media in public opinion, with exercises in reporting and interpretation.
A management conference course for those holding major elected position on the *Red and Black*.
300. **JOURNALISTIC PRODUCTION (INTERNSHIP).** 1 to 15 hours. Prereq: Basic courses in technique and permission of the Dean of the School of Journalism.
Superior students of junior and senior standing are permitted to register for this course as a means of obtaining practical experience over and above that offered in this school. The exact amount of credit will be determined by the circumstances in each case, but the maximum credit for Journalism 100, 200, and 300 is 15 hours.
308. **ADVERTISING LAYOUT.** (Also offered as Art 308).
Fundamentals of color, design, typography, and reproduction as related to modern advertising problems. Layout of newspaper, magazine, and direct-mail advertising.
310. **SENIOR SEMINAR IN ADVERTISING AND PUBLIC RELATIONS.**
1 hour. Prereq: Senior standing in School of Journalism.
Current literature and developments in communications with emphasis on advertising and public relations. Required of all advertising-public relations majors.
350. **BASIC COMMUNICATIONS TECHNIQUES.**
The senior division introductory course in journalism, including news values, reporting, and writing.
351. **COPY READING AND EDITING.** 3 hours. Prereq: Journalism 101 or 350.
The basic course in editing for all types of publications, with special emphasis on newspaper and press service copy. Headline and caption writing.
352. **MAKE-UP AND TYPOGRAPHY.** 3 hours. Prereq: Journalism 101 or 350 and 351.
A continuation of Journalism 351, with special emphasis on newspaper and periodical make-up and typography. Practical work is made possible by a printing laboratory.
360. **ADVANCED REPORTING AND WRITING.** Prereq: Journalism 101 or 350, 140 or 440. Also offered as Journalism 360 a-b-c, 2 hours for each part.
Theory and practice in covering news of municipal, county, state, and federal organizations.
361. **DRAMATIC CRITICISM.** 3 hours.
Theory and practice in reviewing stage productions, motion pictures, and concerts.

362. **THE SHORT STORY.** 3 hours.
A practical writing course for students who have mastered the fundamentals of English expression and who are interested in fundamentals of English expression and who are interested in writing fiction for contemporary magazines or other markets.
368. **CONTEMPORARY JOURNALISTIC PRACTICE.**
A survey of news and feature work for newspapers, radio-tv, and periodicals, for specialized groups, such as students in agriculture, home economics, county agents, etc. Special attention will be given to publicity and public relations.
377. **PHOTOJOURNALISM (JOURNALISTIC PHOTOGRAPHY).** 3 hours.
The technique of news photography with elementary training in the use of various cameras, development, and enlarging. Selection of photographs for publication, including editing, scaling to size, the engraving processes, and caption writing.
420. **THE LITERATURE OF JOURNALISM.**
Ethics, practices, and trends, with emphasis on the literature of the entire communications field.
430. **HISTORY OF JOURNALISM.**
An advanced course in the development of mass media of communications.
440. **PUBLIC OPINION AND JOURNALISM.**
An advanced course in mass media and public opinion, with exercises in reporting and interpretation.
454. **THE LAWS OF COMMUNICATIONS.**
A consideration of certain legal aspects of journalism (radio-television as well as the press), including libel, contempt of court, right of privacy, copyright, and postal laws.
456. **THE MAGAZINE.**
This course is intended for two groups: (1) those who are interested in contemporary thought and in magazines as a phase of American literature; and (2) those who plan to contribute to magazines, and therefore would know the markets.
467. **CONTEMPORARY AMERICAN NEWSPAPERS.** 3 hours.
A study of outstanding present-day newspapers in the United States, including a consideration of their development, noted personalities on their staffs, and their characteristics and policies.
469. **GEORGIA JOURNALISM.** Prereq: Journalism 130 or 430, Political Science 101, and History 459.
A study of the place of Georgia newspapers, periodicals, editors, and contributors in American history and in American journalism.
486. **RADIO-TELEVISION—ORAL INTERPRETATION OF LITERATURE.** Prereq: Speech 108 and/or permission of instructor. (Also offered as Speech 468).
A study of the techniques of literary analysis for effective oral reading of lyric and narrative literature and the development of vocal flexibility through a variety of problems in phrasing and emphasis, with special reference to radio-tv.

487. **RADIO-TELEVISION — DRAMATIC INTERPRETATION.** Prereq: Speech 108 and/or permission of instructor. (Also offered as Speech 487).
A study of the theory, techniques, and principles of interpretations of drama from the points of view of the oral interpreter and actor. Development of oral skills through the study of selected plays and monologues—with special reference to radio-tv.
537. **PUBLIC RELATIONS (PUBLICITY).** 3 hours.
A 3-hour version of Journalism 577. See Journalism 577 for description.
- 544, **RADIO-TELEVISION ACTING, DIRECTING, AND PRODUCTION.**
545, Three separate 5 hour courses. Prereq: Two senior division courses in speech,
546, drama, or radio-television. (Also offered as Speech 544, 545, 546).
Three advanced courses in radio-television acting and directing. Plays will be rehearsed in the laboratory theatre and radio-tv plays broadcast from the studios in the Commerce-Journalism Building. Elective courses open to students having the necessary prerequisites.
553. **THE EDITORIAL.** 3 hours. Prereq: Journalism 101 or 350.
A study of the technique of writing various types of editorials, with practical assignments in each type. A study of interpretation and comment. Students in this course make practical analysis of representative editorial pages.
557. **ADVERTISING AND PUBLIC RELATIONS.**
An introductory survey of advertising and public relations.
558. **FEATURE WRITING AND SPECIAL ARTICLES.** 3 hours.
Theory and practice in writing articles of a varied character for newspapers, magazines, syndicates, trade journals, and radio-television.
559. **LITERATURE APPRECIATION. (Book Reviewing).** 3 hours.
A course in literary appreciation and evaluation with the emphasis on current books and the preparation of reviews for newspapers, magazines, radio-tv, and specialized publications.
563. **ADVANCED FEATURE, FICTION, AND RADIO-TV WRITING.** 3 hours. Prereq: A satisfactory grade in Journalism 362, 558, or 580.
A continuation of production work begun in feature, fiction, or radio-tv writing, with emphasis on marketing, publications, or broadcasting.
564. **NEWSPAPER MANAGEMENT.** 3 hours.
The business aspects of newspaper and periodical publication.
565. **BROADCASTING MANAGEMENT.** 3 hours.
The business aspects of radio and television.
566. **JOURNALISM IN THE SECONDARY SCHOOL.** (Also offered as Education 566).
A survey of news gathering, news writing, copy reading, typography, and business management, with specific relation to the high school newspaper. Also school public relations.
574. **ADVERTISING CAMPAIGNS.** Prereq: Journalism 101 or 350 and 577, 575 and 576.
Planning and preparation of copy and layout for a complete national advertising campaign, with emphasis on media and copy research.

575. **ADVERTISING COPY WRITING.** Prereq: Journalism 101 or 350.
Principles and practices in the preparation of copy for a variety of media. Reader surveys, copy tests, and a study of products in relationship to copy and markets are a part of this course.
576. **ADVERTISING MEDIA.** Prereq: Journalism 101 or 350 and 577 or 575.
A study and evaluation of the principal advertising media, including newspapers, magazines, trade publications, radio-tv, outdoor, novelty, and cinema. The work of an advertising office or agency and the selling of space or time are considered.
577. **PUBLIC RELATIONS (PUBLICITY).**
A study of principles and techniques. Research in interpersonal and mass communications with emphasis on effectiveness studies among various publics.
578. **RETAIL ADVERTISING.** Prereq: Journalism 557 and 575.
Preparation of advertising for various types of retail advertisers and for the various media used by the retailer.
580. **RADIO-TELEVISION IN JOURNALISM.**
Radio and television as phases of journalism.
581. **RADIO-TELEVISION NEWS.** Prereq: Journalism 101 or 350, or special permission.
The processing of news for radio and television. Evaluation of stories, arrangements of 5 and 15 minute newscasts, news spots, and analysis of newscasts being presented over network and local stations.
582. **RADIO-TELEVISION PROGRAMMING.** Prereq: Journalism 580.
A study of programming, with special emphasis on public service and the social aspects of radio and television. An examination of Peabody entries and winners.
583. **RADIO-TELEVISION PERFORMANCE.** (Also offered as 583 a-b-c (2 hours for each part). Prereq: Journalism 101 and 580, 581, or 582 (one of last three). Class will be limited to ten carefully chosen students definitely interested in radio-television as a career.
A laboratory course wherein the student gets actual experience, under faculty supervision, in various aspects of broadcasting and telecasting. On-the-job experience will be supplemented by seminars and regular conferences with instructors.
584. **RADIO-TELEVISION ADVERTISING.** Prereq: Journalism 101 or 350 and 580.
Radio and television as advertising media. Preparation of scripts and various types of commercial programs.
585. **TELEVISION.**
An introductory course concerned with the history, problems, and techniques of television. Theoretical instruction is supplemented by laboratory observation and work in nearby television stations.
586. **CINEMATOGRAPHY.**
A study of basic motion picture production techniques, particularly as they relate to television. Use of motion picture production equipment, including cameras, editing, script writing, and critical analysis.

588. EDUCATIONAL TELEVISION PRODUCTION. (Also offered as Education 588).
Television teaching techniques; role of the studio teacher and the preparation of an educational television lesson series.
589. ADVANCED EDUCATIONAL TELEVISION PRODUCTION. (Also offered as Education 589.)
Studio practice and operation, including preparation of educational television lessons with sets, visuals, and related materials.
590. EMPLOYEE PUBLICATIONS AND SPECIALIZED PERIODICALS.
Prereq: Journalism 101 or 350 and 456.
Purpose, content, appearance, editing of internal and external house publications and specialized periodicals.
591. PUBLIC RELATIONS CASE STUDIES. 3 hours. Prereq: Journalism 577.
Case study approach to public relations.
592. PUBLIC RELATIONS MEDIA. 3 hours. Prereq: Journalism 577 or permission of the instructor.
Utilization of communications media with emphasis on interpretation of the business, industrial, educational, and associational story from the point of view of the public relations practitioner.
593. COMMUNICATIONS FOR SCHOOL ADMINISTRATORS. Prereq: Recommendation of Field Services Office of College of Education.
A study of the communications media used by the public school.
594. PUBLIC RELATIONS FOR SCHOOL ADMINISTRATORS. Prereq: Recommendation of Field Services Office of College of Education. A study of principles and techniques of educational public relations with emphasis on the needs of school administrators.
- 807, 808. ADVERTISING — PUBLIC RELATIONS
809. MASS COMMUNICATIONS IN CONTEMPORARY SOCIETY
810. COMMUNICATIONS RESEARCH METHODS
830. RESEARCH IN JOURNALISM
930. THESIS

School of Pharmacy

Pharmacy

320. PHARMACY ORIENTATION. 2 hours. Prereq: First professional year standing or consent of instructor.
Introduction to the University campus and the School of Pharmacy. Evolution and development of the profession. Current practices, trends, opportunities and ethical standards.

321. PHARMACEUTICAL PREPARATIONS. 4 hours. Prereq: First professional year standing or consent of instructor.
An introduction to dosage forms, their methods of preparation, and selected products of pharmacy.
323. PHARMACEUTICAL CALCULATIONS. 3 hours. Prereq: Math 100-101 and first professional year standing or consent of instructor.
A study of calculations involved in the practice of the profession of pharmacy.
378. PHYSICAL PHARMACY. 4 hours. Three lectures and three hours laboratory. Prereq: Math 100-101, Physics 127 and first professional year standing or consent of instructor.
A study of certain theoretical concepts of pharmaceutical preparations, including physico-chemical considerations of stability and of manufacturing.
- 406, 407, 408. COMPOUNDING AND TECHNOLOGY. 12 hours. (4 hours each quarter).
Three hours lecture and three hours laboratory weekly. Prereq: Pharmacy 320-1-2-3, Physics 128, Chemistry 223 and 341 (Pharmacy 378 for 407).
The general consideration of the underlying principles of prescription compounding. Laboratory work will involve the various types of preparations and the filling of simple prescriptions. A knowledge of typing is required for this course.
- 537, 538, 539. DISPENSING PHARMACY. 12 hours (4 hours each quarter). Two to three hours lecture and four to six hours laboratory weekly. Prereq: Pharmacy 390 and 408.
A thorough study of prescription compounding, with emphasis on prescription reading and incompatibilities. The filling of prescriptions received by telephone is stressed. The lectures present and discuss the problems confronting the practicing pharmacist.

Pharmacognosy

- 404, 405. PHARMACOGNOSY. 8 hours. (4 hours each quarter). Prereq: Completion of first professional year requirements.
The study of drugs of plant and animal origin with emphasis on classification, pharmacological action, and therapeutic use.

Pharmacology

450. INTRODUCTORY PHARMACOLOGY. 4 hours. Four hours lecture weekly. Prereq: Completion of first professional year requirements.
Principles of physiology are studied with consideration being given to those functions altered by drugs.
- 581, 582, 583. PHARMACOLOGY. 12 hours (4 hours each quarter). Four hours lecture weekly for 581, three hours lecture and three hours laboratory weekly for 582 and 583. Prereq: Pharmacy 441-447-450.
Drugs are discussed as to their pharmacological actions, toxicology, and therapeutic application.

Pharmaceutical Administration

303. BUSINESS EDUCATION—TYPEWRITING.* Two hours credit (five periods a week).
An introductory course in typewriting designed to teach in a minimum of time typewriting for personal use.
108. BUSINESS EDUCATION—BUSINESS COMMUNICATION.*
Qualities and principles of effective business letter writing; practice in writing various types of letters and reports.
390. PHARMACEUTICAL LAW. 3 hours. Prereq: First professional year standing or consent of instructor.
A review of the various laws involved in pharmaceutical prescription practice and a study of the state and federal regulations including organization enforcement procedures. Consideration is also given to case histories involving negligence and malpractice.
510. PHARMACEUTICAL ACCOUNTING. Five hours lecture and recitation.
Elementary accounting principles and procedures suitable for small and medium size drug stores operated by independent owners.
- 596, 597. DRUG STORE OPERATIONS. 8 hours. (4 hours each quarter). Three hours lecture and three hours laboratory weekly. Prereq: Pharmacy 510.
A study of the methods, policies and practices pertaining to modern merchandising techniques, as buying, pricing, sales promotion, etc., the planning of lay-out and physical equipment that has proven successful in drug stores of America. This course will also cover the principles of stock control and advertising.

Pharmaceutical Chemistry

322. INORGANIC PHARMACY. 3 hours. Prereq: Chemistry 223 and 340, Pharmacy 321.
A study of inorganic chemical compounds and preparations of value in human therapy.
402. DRUG ASSAY. Three hours lecture, six hours laboratory. Prereq: Chemistry 280.
Official and standard methods of assay of common pharmaceuticals. The student is introduced to instrumentation procedures as used by the modern pharmaceutical firm.
- 440, 441. MEDICINAL CHEMISTRY. 8 hours (4 hours each quarter). Prereq: Chemistry 343.
A study of important pharmaceutical organic products, natural and synthetic, to include sources, properties, reactions, and methods of production.
447. BIOPHARMACY. Four hours lecture, three hours laboratory. Prereq: Chemistry 343.
A study of biochemistry and those problems closely related to pharmacy which are of importance to the practicing pharmacist.

*Elective credit—highly recommended for all students.

The following courses in the pharmacy curriculum are taught by the faculty of the College of Arts and Sciences. A description of the courses may be found in the College of Arts and Sciences section of this catalogue.

MICROBIOLOGY 350, General Microbiology: MICROBIOLOGY 352, Microbiology and Disease; CHEMISTRY 340-1-3, Organic Chemistry: and CHEMISTRY 280, Quantitative Inorganic Analysis.

Undergraduate Professional Electives

Prereq: for all undergraduate professional electives: Completion of second professional year requirements or consent of instructor.

501. PUBLIC HEALTH. 3 hours.

A study of the prevention and control of diseases; promotion of public health and welfare; sanitary control of water, food and sewage; municipal, state and federal health regulations; and other problems of a general health nature.

521. SPECIAL TOPICS IN PHARMACY. 3 hours. Three lecture periods or the equivalent in laboratory periods.

522. PHARMACEUTICAL MANUFACTURING. 3 hours. Two lecture and three laboratory hours weekly.

Lectures to include a study of different equipment used in pharmaceutical manufacturing. Laboratory work to involve pilot plant scale manufacturing.

524. HOSPITAL PHARMACY. 3 hours. Two hours lecture and three hours laboratory.

A course designed to acquaint the student with the operation of a hospital pharmacy.

548. INTRODUCTION TO MEDICINAL CHEMICAL SYNTHESIS. 3 hours.

The synthesis of medicinal agents involving both library and laboratory techniques.

549. RADIO-PHARMACEUTICALS. 3 hours.

Procedures and techniques involved in the handling and use of radioisotopes in pharmaceutical practice.

584. TOXICOLOGY. 3 hours.

A study of the toxic mechanisms, toxic syndromes, antidotes, and emergency and supportive therapy for substances commonly implicated in accidental poisonings.

594. PRESCRIPTION ACCESSORY PRODUCTS. 3 hours.

A study of accessory products related to prescriptions, sickroom needs, rehabilitation and convalescent equipment, surgical supports and other appliances, and miscellaneous products of a general health nature.

595. HOUSEHOLD AND ANIMAL HEALTH PRODUCTS. 3 hours. Three hours lecture and recitation.

The study of fumigants, rodenticides, insecticides, fungicides, weedicides, parasitocides and toxins, serums, vaccines, and related products commonly sold in the drug store. Ethics, economic and legal aspects will be stressed.

598. UNDERGRADUATE RESEARCH PROBLEM. 3 or 5 hours.

An introduction to research. The course is designed to acquaint the student

with the techniques of research. A problem will be assigned and the student will be expected to do library and laboratory work necessary to prepare an acceptable report.

Unless otherwise specified, all laboratory periods are three hours. For any graduate course in pharmacy the prerequisites are two senior division courses in pharmacy or related subjects, plus any specified prerequisites.

721. SPECIAL TOPICS IN PHARMACY.

A study of recent developments in dosage forms including the detailed examination of preparations involving chemical reactions and special assigned topics.

722. PHARMACEUTICAL TECHNOLOGY. Two lecture and nine laboratory hours.

Laboratory work to involve pilot plant scale manufacturing and product development.

723. ADVANCED PHARMACEUTICAL TECHNOLOGY. Prereq: 722. Two hours lecture and nine hours laboratory.

Lecture and laboratory work will place special emphasis on the more complicated procedures encountered in manufacturing. Processing and standardization of pharmaceutical materials will be included.

724. HOSPITAL PHARMACY. 3 hours. Two hours lecture and three hours laboratory.

Advanced study of the functions and practices of a hospital pharmacy. Emphasis on supervision and economics of a hospital pharmacy.

725. ADVANCED HOSPITAL PHARMACY. Prereq: 724.

A discussion and analysis of the total operation of a hospital pharmacy with emphasis on administrative and professional services.

781, PHARMACOLOGY. 12 hours. (4 hours each quarter). Four hours weekly

782, for 781, three hours lecture and one laboratory weekly for 782 and 783. Re-

783. quired for graduate students majoring in pharmacology having undergraduate degrees in fields other than pharmacy. Prereq: Pharmacy 447 and 450 or equivalent or consent of instructor.

Drugs are discussed as to their pharmacological actions, toxicology, and therapeutic application.

803. PHARMACY SEMINAR

809. MEDICINAL CHEMISTRY

810. PHARMACEUTICAL CONTROL AND ANALYSIS

811, SYNTHETIC MEDICINAL PRODUCTS

812.

814, ORGANIC PHARMACEUTICAL SYNTHESIS

815.

816, NATURAL MEDICINAL PRODUCTS, SYNTHESIS AND DEGRADA-

817. TION

818. NATURAL PRODUCTS—POLYMERS IN MEDICINAL CHEMISTRY

823, ADVANCED PHYSICAL PHARMACY

824.

- 830. RADIATION PRINCIPLES
- 840. PHYSICO-CHEMICAL PRINCIPLES OF DRUG ACTION
- 841.
- 842. ADVANCED PHARMACOLOGY
- 843.
- 844. METHODS IN PHARMACOLOGICAL RESEARCH

School of Social Work

- 400. SOCIAL WORK PRACTICE: PHILOSOPHY AND APPLICATIONS.
Up to 5 hours.
Role and function of professional social work practice in dealing with current social welfare problems. Historical background. Ethical and normative considerations.
- 441. THE BASES OF SOCIAL FUNCTIONING I. Up to 5 hours.
Interrelationship of biological, psychological, social, and economic factors in maintaining the individual's social functioning at various developmental periods.
- 442. THE BASES OF SOCIAL FUNCTIONING II. Up to 5 hours. Prereq: Social Work 641.
Continuation of Social Work 641 with emphasis on divorce and pathological behavior.
- 501. SOCIAL WORK PRACTICUM I. Prereq: Social Work 741 (or concurrent).
Practical experience in a social agency under social work supervision.
- 502. SOCIAL WORK PRACTICUM II. Prereq: Social Work 701, 742 (or concurrent).
- 532. METHODS AND PROCEDURES IN ASSESSING COMMUNITY SOCIAL WELFARE NEEDS. Up to 5 hours.
Basic techniques in surveying social welfare needs in the community. Descriptive statistics. Introduction to sampling.
- 540. INTRODUCTION TO SOCIAL CASEWORK. Up to 5 hours.
Casework as a method of social work practice. Basic elements in establishing and maintaining the professional relationship. Impact upon family functioning. Influence of agency setting.
- 541. INTRODUCTION TO SOCIAL WORK METHODS I. Up to 5 hours.
Prereq: Social Work 600 or equivalent or permission.
Current developments in the application of various social work methods to types of problems encountered in social work practice.
- 542. INTRODUCTION TO SOCIAL WORK METHODS II. Up to 5 hours.
Prereq: Social Work 741.
Continuation of Social Work 741.
- 544. CASEWORK WITH CHILDREN AND FAMILIES. Up to 5 hours. Prereq: Social Work 740 or 741.

More intensive examination of the social casework process with a special emphasis on children in their families.

550. PRINCIPLES OF SOCIAL GROUP WORK. Up to 5 hours. Prereq: Social Work 741 or equivalent or permission.
Introduction to work with groups in various settings: the community center, the hospital, the mental health center. Relationship to community economic improvement programs, recreation and informal education.
570. PRINCIPLES OF SOCIAL WORK ADMINISTRATION. Up to 5 hours. Prereq: Social Work 740 or equivalent or permission.
Introduction to administration of social agency programs. Departmental coordination and function. Boards and committees.
580. LAW AND SOCIAL WORK. Up to 5 hours.
Legal implications of social work practice, and legal controls over social work practice and the operations of social agencies.
612. PROBLEMS OF SOCIAL POLICY IN THE SOUTHERN COMMUNITY. Up to 5 hours. Prereq: Social Work 600 or equivalent or permission.
Survey of health and welfare problems in selected communities within the state and region. Extending available resources to meet current needs.
620. SOCIAL POLICY AND SERVICES IN SELECTED SOCIAL WELFARE AREAS. Up to 5 hours. Prereq: Social Work 600 or equivalent or permission.
Detailed study of one aspect of social welfare services on local, state and national levels.
- 620a Income Maintenance and Social (or Economic) Security
 - 620b Families and Children
 - 620c Corrections
 - 620d Medical Services and Programs
 - 620e School Social Services
 - 620f Mental Retardation
 - 620g School Social Work

Courses for Graduate Professional Students in the M.S.W. Program

(For detailed course descriptions, see the Graduate School Bulletin or the School of Social Work Bulletin.)

- 800. PROFESSIONAL RESPONSIBILITY IN SOCIAL WORK
- 801. SEMINAR IN SOCIAL WORK
- 803. SOCIAL WELFARE POLICY AND SERVICES I
- 804. SOCIAL WELFARE POLICY AND SERVICES II
- 815. PERSPECTIVES IN SOCIAL WELFARE HISTORY
- 820. SEMINAR IN SELECTED ASPECTS OF SOCIAL WELFARE POLICY AND SERVICES
- 831. THE LOGIC OF PROFESSIONAL JUDGMENTS IN SOCIAL WORK
- 832. SOCIAL WORK RESEARCH PRACTICUM

- 841. HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT I
- 842. HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT II
- 843. HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT III
- 844. HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT IV
- 845. HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT V
- 846. SOCIAL FUNCTIONING: CULTURAL AND SOCIAL CLASS FACTORS
- 847. COMMUNICATION AND SOCIAL FUNCTIONING
- 848. SOCIAL INTERACTION: STRUCTURE AND PROCESS
- 901. FIELD INSTRUCTION I
- 902. FIELD INSTRUCTION II
- 903. FIELD INSTRUCTION III
- 904. FIELD INSTRUCTION IV
- 921. RESEARCH PROBLEM
- 941. SOCIAL WORK METHODS I
- 942. SOCIAL WORK METHODS II
- 943. SOCIAL WORK METHODS III
- 944. SEMINAR IN SOCIAL CASEWORK I
- 945. SEMINAR IN SOCIAL CASEWORK II
- 953. FOUNDATIONS OF SOCIAL GROUP WORK
- 954. SEMINAR IN SOCIAL GROUP WORK I
- 955. SEMINAR IN SOCIAL GROUP WORK II
- 963. FOUNDATIONS OF COMMUNITY ORGANIZATION
- 964. SEMINAR IN COMMUNITY ORGANIZATION I
- 965. SEMINAR IN COMMUNITY ORGANIZATION II
- 973. FOUNDATIONS OF SOCIAL WORK ADMINISTRATION
- 979. SUPERVISION AND CONSULTATION IN SOCIAL WORK

School of Veterinary Medicine

Anatomy and Histology (VAH)

Head: Bell. Staff: Blair, Few, Holloway, Loveless, Westerfield.

- 309. ANATOMY OF FARM ANIMALS. Four lectures and 2 hours of laboratory. Prereq: Zoology 226 (or its equivalent). Offered each fall quarter to students in the College of Agriculture.
An introduction to the gross, microscopic, and developmental anatomy of the common farm animals.
- 311. GROSS ANATOMY OF THE DOMESTIC ANIMALS. 17 hours. 311: Two

- 312, lectures and 13 hours of laboratory. 312: 15 hours of laboratory. 313: Three lectures and 8 hours of laboratory.
Topographic and systematic study by complete dissection of the horse, ox, sheep (or goat), pig, dog, and fowl.
402. **VETERINARY HEMATOLOGY.** Prereq: Zoology 357 or equivalent and one related senior division course. Open to biology majors who meet the prerequisites.
A comparative study of the normal and abnormal morphology of the peripheral cells and bone marrow elements of domestic animals. Library research papers are required to be prepared.
403. **APPLIED ANATOMY OF THE DOMESTIC ANIMALS.** 2 hours. One lecture and two hours of laboratory.
A special study of anatomy as related to diagnosis, surgery, and obstetrics.
- 404, **HISTOLOGY AND EMBRYOLOGY OF THE DOMESTIC ANIMALS.**
405, 15 hours. Two lectures and three two-hour laboratory periods each quarter.
406. Prereq: Zoo. 226 or equivalent and 2 senior division courses in biology.
A combined study sequence of the development and normal comparative micromorphology of all organs and tissues of domestic animals.
410. **ANATOMICAL TECHNIQUE.** 2 to 5 hours. Three hours of laboratory for each credit hour. Prereq: Anatomy 313 and 406 or their equivalent. Offered on demand.
Instruction in the technique of preparation of animals for dissection as well as methods of preparation of material for microscopic study.
801. **PROBLEMS IN VETERINARY ANATOMY**
803. **ADVANCED VETERINARY HISTOLOGY**

Medical Microbiology (MPM)

Head and Director Medical Microbiology Program: Gratzek

Staff: Brown, Davis, Dawe, Foster, Hubbard, Kleckner, Lukert, Neurauter, Page, Reid, Rickey, Schmittle, Tumlin, VanEseltine, Williams.

Director General Microbiology Program: Payne

Staff: Eagon, Giddens, Hamby, Howe.

Instruction in microbiology is coordinated with the curricula in the Department of Bacteriology, College of Arts and Sciences and the Departments of Food Science, Dairy, and Agronomy, College of Agriculture. For additional course listings in this and related fields, see announcements of College of Arts and Sciences and College of Agriculture.

The curriculum in Poultry Diseases and Parasites is coordinated with the Poultry Department, College of Agriculture, the Poultry Disease Research Center, College Experiment Station, and the S. E. Poultry Research Laboratory, A.D.P., A.R.S., U.S.D.A.

Medical Microbiology

380. **INTRODUCTORY VETERINARY MICROBIOLOGY.** Three lectures and two double laboratory periods. Prereq: First year veterinary curriculum. Other

qualified students by arrangement with the head of the department.

Covers the fundamental principles and techniques of the science of microbiology.

410. (Microbiology) IMMUNOLOGY. Three lectures and two three-hour laboratory periods. Prereq: Microbiology 380 or 400 and Chemistry 451 or consent of instructor, Veterinary Building.
Mechanisms of infection and host resistance; principles and techniques of serology.
422. (Microbiology) PATHOGENIC BACTERIOLOGY. Three lectures and two double laboratory periods. Prereq: Microbiology 410. Veterinary Building.
Studies in the morphological, cultural and physiological properties of the important pathogenic bacterial and mycotic agents; their relation to health and disease is emphasized.
450. (Microbiology) VIROLOGY. Three lectures and two double laboratory periods. Prereq: Microbiology 410. Veterinary Building.
An introduction to the viruses and rickettsiae: principles and methodology.
451. ANIMAL VIRUSES. 3 hours. Two lectures and three hours of laboratory. Prereq: Second year veterinary curriculum or consent of instructor.
Studies on the viruses as infectious agents embracing the important viral diseases of animals including the zoonoses.
810. (Microbiology) IMMUNOCHEMISTRY
816. (Microbiology) SEMINAR IN MICROBIOLOGY
820. (Microbiology) ADVANCED PATHOGENIC MICROBIOLOGY
900. (Microbiology) PROBLEMS IN MICROBIOLOGY

Veterinary Preventive Medicine

311. VETERINARY HYGIENE. Prereq: Vet. Physiology 310; Microbiology 350.
Offered each spring quarter to students in the College of Agriculture.
A survey course dealing with the common diseases of livestock in Georgia, with emphasis on prevention and control through better management and sanitation on the farm.
373. (Poultry) POULTRY HEALTH. Prereq: Poultry Husbandry 160 and Microbiology 350. Offered to students majoring in poultry husbandry and others that are qualified. (Offered in alternate years. Offered in 1968-69.)
A study of the common infections, parasitic and nutritional diseases of poultry; their cause, diagnosis, prevention and control.
475. POULTRY DISEASES. Prereq: Third year veterinary curriculum.
A study of the etiology, epidemiology, pathogenesis, diagnosis, prevention, control and treatment of infectious, nutritional and parasitic diseases of poultry.
480. VETERINARY PUBLIC HEALTH. 3 hours. Prereq: Fourth year veterinary curriculum.
A study of the sanitary, epidemiological and regulatory aspects of public health programs, particularly as human health is affected by diseases of animals transmissible to man; the veterinarian's role in local, state and federal public health organization.

484. **FOOD HYGIENE.** Prereq: Fourth year veterinary curriculum.
A survey of the municipal, state and federal regulatory measures governing transportation, slaughter, merchandising and disposal of meat, meat food products and poultry; the application of dairy hygiene and public health measures to the production, processing and distribution of clean, safe milk and dairy products.
800. **SEMINAR IN VETERINARY PREVENTATIVE MEDICINE**
801. **MICROSCOPIC PATHOLOGY OF POULTRY**
808. (Poultry) **PARASITIC DISEASES OF POULTRY**
809. (Poultry) **POULTRY DISEASES AND PARASITES**
811. (Poultry) **PROBLEMS IN POULTRY DISEASES AND PARASITES**

Medicine and Surgery (VMS)

Head: Morton. **Staff:** Acree, Adsit, Barrett, Beadle, Blackmon, Bentley, Causey, Christy, Edens, Gaskins, Hoffman, Jones, Kittrell, Kreuz, Shannon, Thrasher, Widdowson, Williams.

300. **VETERINARY MEDICINE.** 2 hours. Two lectures per week.
A survey of the scope, objectives, obligations and opportunities in the broad field of veterinary science.
402. **LARGE ANIMAL MEDICINE.** Diseases of farm animals pertaining to the digestive, urinary, and blood forming systems.
403. **LARGE ANIMAL MEDICINE.** Diseases of farm animals pertaining to the respiratory and lymphatic systems and disease due to disturbances of metabolism.
404. **LARGE ANIMAL MEDICINE.** 2 hours. Diseases of farm animals pertaining to locomotion and special senses.
410. **SMALL ANIMAL MEDICINE.** 9 hours.
411. The pathology, diagnosis and treatment of diseases of small animals.
- 412.
416. **OBSTETRICS AND GENITAL DISEASES.**
A study of the principles of veterinary obstetrics and the diseases of reproduction.
420. **SURGERY.**
A survey of general surgical pathology, therapeutics, wound infection, asepsis, antisepsis, anesthesia, and the fundamentals of operative techniques. Including also a detailed study of special and regional surgery of both large and small animals.
421. **SURGICAL TECHNIQUES. Large Animals.**
Surgical exercises cover instructions, demonstration and practice on pre-operative preparation, anesthesia, operative techniques and postoperative care of large animals.
422. **SURGICAL TECHNIQUES. Small Animals.**
Surgical exercises cover instructions, demonstration and practice on preoperative

preparation, anesthesia, operative techniques, and postoperative care of small animals.

470. INFECTIOUS AND EPIZOOTIC DISEASES. 9 hours. Prereq: Third and
471. fourth year veterinary curriculum.

A study of the infectious and epizootic diseases of animals; embracing the history, etiology, transmission, symptoms, lesions, diagnosis and management of each disease.

480. RADIOLOGY. 4 hours.

The principles of radiology; darkroom, X-ray and fluoroscopic techniques; radiologic aspects of diseases and injuries in animals; and introduction to the therapeutic use of X-ray.

485. ETHICS AND BUSINESS. 2 hours.

A study of the ethical obligations and business aspects of veterinary practice.

487. JURISPRUDENCE. 1 hour.

A survey of the laws and regulations governing veterinary medicine, including contracts, leases, liabilities, stockyard and transportation laws.

489. VETERINARY ANIMAL MANAGEMENT. 3 hours.

Instruction covers the responsibility of the veterinarian as an advisor to the herd owner in management problems.

The Veterinary Clinics

- 450 a-b-c. CLINICAL ORIENTATION. Required.

This course is intended to prepare the student for clinic preceptorship. He will be instructed in the techniques of examining, treating and handling and caring for animals. There will be a certain number of formal lectures. Emphasis will be placed on actual participation by the student.

- 451, LARGE ANIMAL CLINICS AND CONF. 2 hours credit each quarter.

452,

453,

454.

- 456, SMALL ANIMAL CLINICS AND CONF. 2 hours credit each quarter.

457,

458,

459.

471. PATHOLOGIC DIAGNOSIS AND CONF. 2 hours credit each quarter.

472,

473,

474.

- 476, AMBULATORY CLINICS AND CONF. 2 hours credit each quarter.

477,

478,

479.

- 486, AVIAN CLINICS AND CONF. 2 hours credit each quarter.
487,
488,
489.

Pathology and Parasitology (VPP)

Head: Tyler. Staff: Chapman, Hayes, Jordan, Morgan, Papp, Shotts.

Associate Staff: Sikes

- 408, VETERINARY PARASITOLOGY. 10 hours. Three lectures and two three-
409. hour laboratory periods.
Included are studies on taxonomy, morphology, life history, pathological manifestations, diagnosis and control of parasitic protozoa, helminths and arthropods.
425. GENERAL ANIMAL PATHOLOGY. Three lectures and two double periods of histopathological laboratory.
An introduction to pathology which considers the dynamic responses of the animal body to disease.
- 426, SPECIAL ANIMAL PATHOLOGY. Three lectures and two double periods
427. of histopathological laboratory.
The application of general pathologic processes to various body systems with emphasis on the pathogenesis of lesions and their clinical manifestations. Also considered are the pathologic alterations produced by specific diseases.
461. CLINICAL PATHOLOGY. Three lectures and two three-hour laboratory periods.
The course is designed to instruct the student in the performance of laboratory diagnostic procedures.
- 608, VETERINARY PARASITOLOGY. 10 hours 608: Three lectures, two three-
609. laboratory periods and three seminar hours.
Included are studies on taxonomy, morphology, life history, pathological manifestations, diagnosis and control of parasitic protozoa, helminths and arthropods.
801. PATHOLOGY OF PARASITIC DISEASES IN ANIMALS
802. VETERINARY PATHOLOGY AND PARASITOLOGY
803. VETERINARY SURGICAL PATHOLOGY
805. PROBLEMS IN VETERINARY PATHOLOGY AND PARASITOLOGY
814, SEMINAR IN VETERINARY PATHOLOGY AND PARASITOLOGY
815,
816.
- 820, THE PATHOLOGY OF NUTRITIONAL DISEASES OF ANIMALS
821.
830. NEUROPATHOLOGY
831. MYCOPATHOLOGY
832. DISEASES OF LABORATORY ANIMALS

- 833. ANIMAL ONCOLOGY
- 834. COMPARATIVE PATHOLOGY
- 835. EXPERIMENTAL PATHOLOGY
- 850. DISEASES OF WILDLIFE.
- 851.

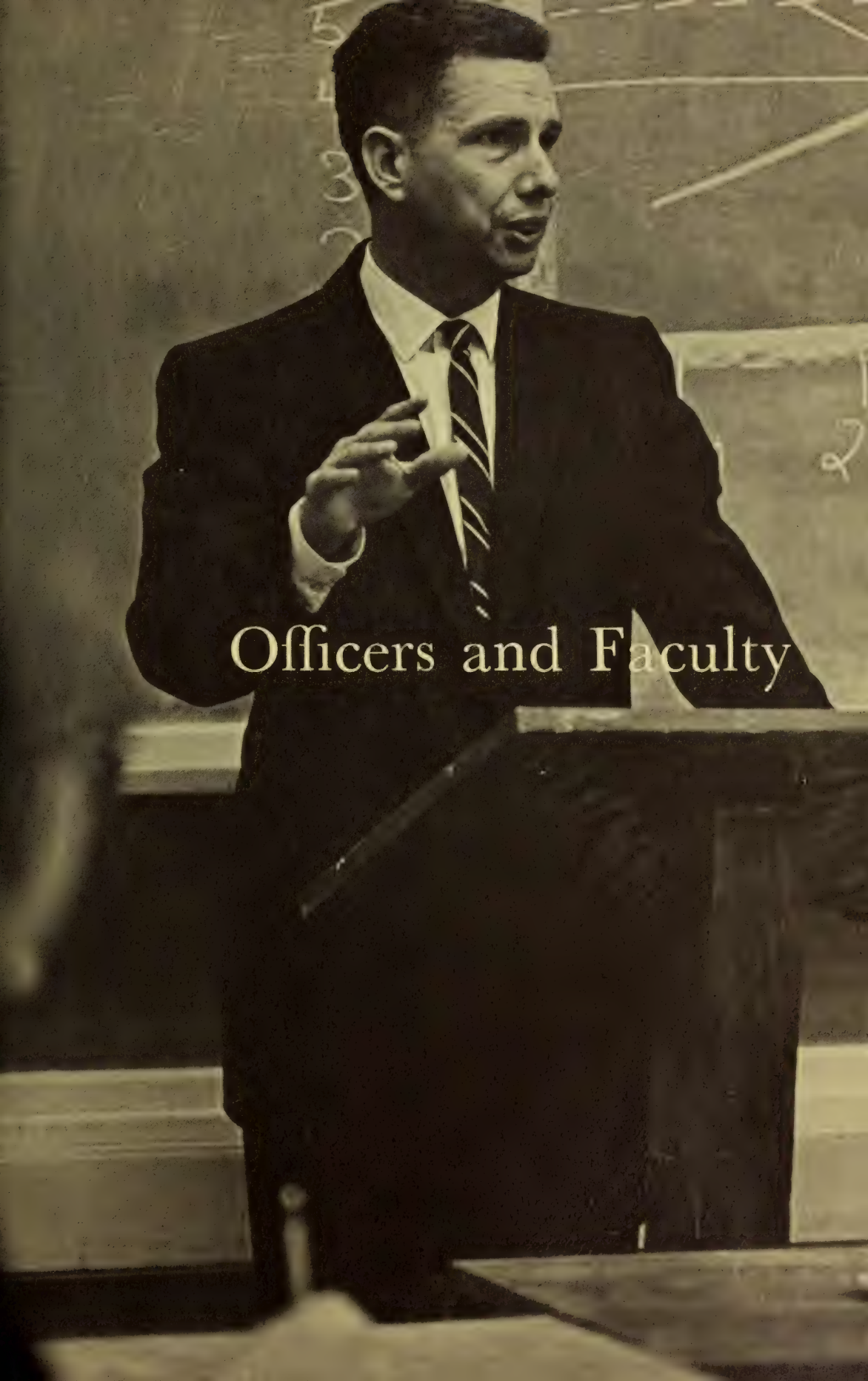
Physiology and Pharmacology (VPH)

Head: Talbot. Staff: Bowen, Caster, Crawford, Huber, Jones, Kornfeld, McQueen, Piercy, Siegel, Stattelman.

- 310. PHYSIOLOGY OF DOMESTIC ANIMALS. Four lectures and one two-hour laboratory. Prereq: Anat. 309 or equivalent and permission of instructor. A general comparative consideration of physiological principles of domestic animals. Especially arranged for students not majoring in veterinary medicine.
- 406. COMPARATIVE MAMMALIAN PHYSIOLOGY. 5 hours. Three lectures and one four-hour laboratory. Prereq: Anatomy 312, Physiol. Chemistry 452. A presentation of the animal body as a single functioning organism including study of the cell, body fluids, blood, and the peripheral nervous and muscular systems.
- 407. COMPARATIVE MAMMALIAN PHYSIOLOGY. Three lectures and one four-hour laboratory. A continuation of 406 including study of the heart and circulation, respiration, central nervous system, and alimentary tract.
- 408. COMPARATIVE MAMMALIAN PHYSIOLOGY. Three lectures, one seminar hour and one four-hour laboratory. A continuation of 406 and 407 including metabolism and temperature regulation, endocrinology, reproduction and radiation biology.
- 410. VETERINARY MEDICAL ENDOCRINOLOGY. Four lectures and one three-hour laboratory. Integrated functional aspects of the endocrine system.
- 422. VETERINARY MEDICAL TOXICOLOGY. 2 hours. Two two-hour periods of demonstrations, laboratories or field trips. Study of poisons including poisonous plants, their action on living cells, detection and identification.
- 430. VETERINARY MEDICAL PHARMACOLOGY. Five lectures. Mechanisms of drug actions on physiological systems.
- 431. VETERINARY MEDICAL PHARMACOLOGY. Four lectures and one two-hour laboratory. Mechanisms and factors modifying the action of drugs and familiarization with currently used drugs.
- 435. PROBLEMS IN CLINICAL PHARMACOLOGY. 3-10 hours. Prereq: permission of instructor. Intensive study of an approved clinical pharmacology problem by advanced students in veterinary medicine curriculum.
- 450. ANIMAL NUTRITION AND DEFICIENCY DISEASES. Nutritive requirements of animals and diseases of a nutritional origin.

451. PHYSIOLOGICAL CHEMISTRY. Four lectures and one two-hour laboratory.
Fundamental biochemical processes occurring in the animal body.
452. PHYSIOLOGICAL CHEMISTRY. Four lectures and one two-hour laboratory.
A continuation of 451 with advanced study of the biochemistry of physiological processes.
606. COMPARATIVE MAMMALIAN PHYSIOLOGY. Prereq: Zoology 356 or equivalent and Biochemistry 452 or permission of instructor. Three lectures and one four-hour laboratory.
A presentation of the animal body as a single functioning organism including study of the cell, body fluids, blood and the peripheral nervous and muscular systems.
607. COMPARATIVE MAMMALIAN PHYSIOLOGY. Prereq: VPH 606. Three lectures and one four-hour laboratory.
A continuation of 606 including the heart and circulation, respiration, central nervous system, and alimentary tract.
608. COMPARATIVE MAMMALIAN PHYSIOLOGY. Prereq: VPH 607. Three lectures, one seminar hour and one four-hour laboratory.
A continuation of 606 and 607 including metabolism and temperature regulation, endocrinology, reproduction and radiation biology.
635. PROBLEMS IN CLINICAL PHARMACOLOGY. 3 to 10 hours. Prereq: permission of instructor.
Intensive study of a specific approved problem in pharmacology.
806. ADVANCED PHYSIOLOGY
- 807.
810. COMPARATIVE MEDICAL ENDOCRINOLOGY
811. PROBLEMS IN ENDOCRINOLOGY
840. NEUROPHYSIOLOGY
900. PROBLEMS IN PHYSIOLOGY
930. THESIS

NOTES

A black and white photograph of a man in a dark suit, white shirt, and striped tie, standing at a podium and speaking. He is gesturing with his right hand. Behind him is a chalkboard with some faint writing, including the number '2' and some lines. The text 'Officers and Faculty' is overlaid on the image in a serif font.

Officers and Faculty

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Board of Regents University System of Georgia

244 Washington Street, S. W., Atlanta

JACK ADAIR, Atlanta <i>State-at-Large</i>	January 13, 1965—January 1, 1971
ROY V. HARRIS, Augusta <i>State-at-Large</i>	January 1, 1967—January 1, 1974
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JAMES A. DUNLAP, Gainesville <i>Ninth Congressional District</i>	January 10, 1966—January 1, 1973
G. L. DICKENS, JR., Milledgeville <i>Tenth Congressional District</i>	February 15, 1965—January 1, 1972

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Benjamin Clarke Kinney, Director of Physical Plant
Jenkins Comer Whitehead, Director of Statistical Bureau

* Died February 24, 1967

COLLEGES AND SCHOOLS

GRADUATE SCHOOL — Gerald Boone Huff, Dean

COLLEGES OF ARTS AND SCIENCES — John Olin Eidson, Dean

SCHOOL OF LAW — Martin Lindsay Cowen, Dean

SCHOOL OF PHARMACY — Kenneth Lee Waters, Dean

COLLEGE OF AGRICULTURE — Calvin Clyde Murray, Dean

SCHOOL OF FORESTRY — Allyn Marsh Herrick, Dean

COLLEGE OF EDUCATION — Joseph Anderson Williams, Dean

COLLEGE OF BUSINESS ADMINISTRATION — J. Whitney Bunting, Dean

SCHOOL OF JOURNALISM — John Eldridge Drewry, Dean

SCHOOL OF HOME ECONOMICS — Mary Speirs, Dean

SCHOOL OF VETERINARY MEDICINE — L. Meyer Jones, Dean

SCHOOL OF SOCIAL WORK — Charles Ashley Stewart, Dean

Regents' Professors, Alumni Distinguished Professors and Holders of Endowed Chairs

STANLEY HUMPHREYS AINSWORTH, Alumni Foundation Distinguished Professor of Speech Correction and Chairman of Speech Correction and of the Program for Exceptional Children

JULES CESAR ALCIATORE, Alumni Foundation Distinguished Professor Emeritus of French

WILLIAM RANDOLPH BEATON, Georgia Association of Real Estate Boards Associate Professor of Real Estate

CALVIN SMITH BROWN, Alumni Foundation Distinguished Professor of Comparative Literature

GLENN WILLARD BURTON, Alumni Foundation Distinguished Professor of Agronomy, Principal Geneticist, Tifton, Georgia, U.S.D.A.

ELLIS MERTON COULTER, Regents' Professor Emeritus of History

ROBERT REUBEN DINCE, JR., Georgia Bankers Association Professor of Banking and Head of the Department of Banking and Finance

LAMAR DODD, Regents' Professor of Art, Head of the Department of Art and Chairman of the Division of Fine Arts

RUDOLPH HENRY DRIFTMIER, Alumni Foundation Distinguished Professor Emeritus of Agricultural Engineering, Emeritus Head of the Department of Agricultural Engineering, and Chairman of the Division of Agricultural Engineering

TOMLINSON FORT, Regents' Professor Emeritus of Mathematics Center

HAROLD MILTON HECKMAN, Alumni Foundation Distinguished Professor Emeritus of Accounting and Emeritus Head of the Department of Accounting

HUGH HODGSON, Regents' Professor Emeritus of Music

ROBERT BARCLAY McGHEE, Alumni Foundation Professor of Zoology and Head of the Department of Zoology

HAROLD DONALD MORRIS, Terrell Professor of Agronomy

EUGENE PLEASANTS ODUM, Alumni Foundation Distinguished Professor of Zoology

EDD WINGFIELD PARKS, Alumni Foundation Distinguished Professor of English

WILLARD MALCOLM REID, Alumni Foundation Distinguished Professor of Poultry, College Experiment Station

ALBERT BERRY SAYE, Alumni Foundation Distinguished Professor of Political Science

ALFRED WITHERSPOON SCOTT, Terrell Professor Emeritus of Chemistry

JASPER GUY WOODROOF, Alumni Foundation Distinguished Professor of Food Technology, Head of the Department of Food Technology and Chairman of the Division of Food Technology

Faculty

- AARON, IRA EDWARD, Professor of Education
A.B.J., M.Ed., Georgia; Ph.D., Minnesota
- AARON, ROBERT L., Instructor in Education
A.B.J., B.S., M.Ed., Georgia
- AARON, THOMAS DANIEL, JR., Associate Grain Marketing Specialist, Agricultural Extension
B.S.A., M.S., Georgia; Ph.D., Texas A & M
- ABE, SHOKICHI, Research Associate in Biochemistry
Ph.D., Tokyo University
- ABBE, WINFIELD JONATHAN, Assistant Professor of Physics
A.B., Ph.D., California; M.S., California State College
- ABBOTT, DEAN FREDERICK, Instructor in Landscape Architecture
B.S., Michigan State; M.L.A., Harvard
- *ABNEY, GEORGE MORRIS, Assistant Professor of Journalism
A.B.J., M.A., Georgia
- ADAMS, HENRY EARL, Associate Professor of Psychology
B.A., California; M.A., Ph.D., Louisiana State
- ADAMS, JOHN CHESLEY, JR., Assistant Professor of Education and Counselor in the Guidance Center
B.S., M.S., Georgia Southern; Ed.D., Florida State
- ADAMS, VIRGIL EMERSON, Assistant Editor-News, Agricultural Extension
B.S., Murray State College (Ky.); M.A., Georgia
- **ADAMS, WILLIAM ENGENTIUS, Research Associate of Agronomy, A.R.S., U.S.D.A.
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***Died June 14, 1966.

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The University of Georgia

CALENDAR 1967-68

SUMMER QUARTER, 1967

FIRST TERM

JUNE 12	Registration
JUNE 13	Classes begin
JULY 4	Holiday
JULY 20	Term ends

SECOND TERM

JULY 24	Registration and Classes begin
AUGUST 18	Term ends—Graduation

FALL QUARTER, 1967

SEPTEMBER 19	Residence Halls Open
SEPTEMBER 20	Orientation—new upper class students
SEPTEMBER 21-22	Registration
SEPTEMBER 25	Classes begin for all students
SEPTEMBER 18-30	AATES and Workshop registration
SEPTEMBER 23	Saturday Classes registration
NOVEMBER 23-26	Thanksgiving recess (begins at noon on Nov. 22)
DECEMBER 8	Classes end
DECEMBER 9	Exam study period
DECEMBER 11-15	Examinations
DECEMBER 15	Term ends
DECEMBER 16	Christmas vacation begins

WINTER QUARTER, 1968

JANUARY 2 & 3	Registration—Saturday, Jan. 6, will be regular class day.
JANUARY 4	Classes begin
FEBRUARY 29	Constitution Examination
MARCH 8	Classes end
MARCH 9	Exam study period
MARCH 11-15	Examinations
MARCH 15	Term ends
MARCH 16-20	Spring recess

SPRING QUARTER, 1968

MARCH 21 & 22	Registration
MARCH 25	Classes begin
MAY	Annual Inspection Air and Army ROTC
MAY 15	Honors Day
MAY 31	Classes end
JUNE 1	Exam study period
JUNE 3-7	Examinations
JUNE 8	Term ends—Graduation

SUMMER QUARTER, 1968

JUNE 17-AUGUST 23

1967 Calendar 1967

APRIL								JULY								OCTOBER							
S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S	
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2	3	4	5	6	7	8		2	3	4	5	6	7	8		8	9	10	11	12	13	14	
9	10	11	12	13	14	15		9	10	11	12	13	14	15		15	16	17	18	19	20	21	
16	17	18	19	20	21	22		16	17	18	19	20	21	22		22	23	24	25	26	27	28	
23	24	25	26	27	28	29		23	24	25	26	27	28	29		29	30	31					
30								30	31														
MAY								AUGUST								NOVEMBER							
S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S	
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7	8	9	10	11	12	13		6	7	8	9	10	11	12		5	6	7	8	9	10	11	
14	15	16	17	18	19	20		13	14	15	16	17	18	19		12	13	14	15	16	17	18	
21	22	23	24	25	26	27		20	21	22	23	24	25	26		19	20	21	22	23	24	25	
28	29	30	31					27	28	29	30	31				26	27	28	29	30			
JUNE								SEPTEMBER								DECEMBER							
S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S	
				1	2	3							1	2							1	2	
4	5	6	7	8	9	10		3	4	5	6	7	8	9		3	4	5	6	7	8	9	
11	12	13	14	15	16	17		10	11	12	13	14	15	16		10	11	12	13	14	15	16	
18	19	20	21	22	23	24		17	18	19	20	21	22	23		17	18	19	20	21	22	23	
25	26	27	28	29	30			24	25	26	27	28	29	30		24	25	26	27	28	29	30	
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1968 Calendar 1968

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THE UNIVERSITY OF GEORGIA
ATHENS, GEORGIA



KEY

Faculty parking
Zone parking
Construction
& Staff







